

OCT 22 1923

MSS. and other Communications for the Editor should be addressed to G. E. MOORE, Litt.D., 86 Chesterton Road, Cambridge

No contribution reaching the Editor later than 10th December next can appear in the January Number of MIND.

In consequence of the continued increase in the cost of production it has been necessary to raise the subscription price of MIND from 12/- to 16/- a year, and of single numbers from 4/- to 4/6. The price to members of the Association remains however the same.

VOL. XXXII. No. 128.

OCTOBER, 1923.

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MIND

A QUARTERLY REVIEW

OF

PSYCHOLOGY AND PHILOSOPHY.

EDITED BY

G. E. MOORE,

WITH THE CO-OPERATION OF PROFESSOR PRINGLE-PATTISON, PROFESSOR C. D. BROAD, AND F. C. BARTLETT, M.A.

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PUBLISHED FOR THE MIND ASSOCIATION BY
MACMILLAN & CO., LIMITED,
ST. MARTIN'S STREET, LONDON, W.C. 2.

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MIND

A QUARTERLY REVIEW

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PSYCHOLOGY AND PHILOSOPHY

I.—BERNARD BOSANQUET.

By J. H. MUIRHEAD.

BERNARD BOSANQUET who died on 8th February of the present year was in a sense, as *The Times* said of him, the central figure in British Philosophy for a whole generation. When it was proposed just before the war to hold an International Congress of Philosophy in 1915 he was unanimously appointed President of an Acting Committee representing all schools of thought. Though not the originator of the particular view of the nature of ultimate reality or the Absolute with which he has been identified, he may be said to have been its most valiant, courtly and chivalrous knight, carrying its standard into every field, and bearing ungrudgingly and with unfailing equanimity the blows he knew he should encounter there. As one of his younger contemporaries who happened to be intimately associated with him during some of his most active years in the 'eighties and 'nineties I have been asked by the Editor of *MIND* to attempt the difficult task of giving its readers some idea both of his personality and of the subtle and refined form of Idealism for which he stood.

He was a member of the old and distinguished Huguenot family of the Bosanquets of Dingestow, and was the youngest son of the Rev. R. W. Bosanquet of Rock Hall, Northumberland. He was the brother of Admiral Sir Day H. Bosanquet and uncle of Professor R. Carr Bosanquet of Liverpool University. Born in 1848 he was educated at Harrow and Balliol College, Oxford, which he joined as a scholar when Jowett's influence was at its height. After graduating in *Litterae Humaniores* with firsts in Mods. and Greats, he

taught for ten years as Fellow and Tutor in University College. But the call of philosophy and his interest in practical social work in connexion with the Charity Organisation Society, which already had as its secretary his life-long friend Charles Loch, led him in 1881 to give up tutorial work and go to live in London. It was some five years later while he was living in chambers in Ebury Street that I came to be associated with him in the foundation of the London Ethical Society, an offshoot of the Ethical movement initiated by Professor Felix Adler of New York. In his book on the *Meeting of Extremes in Contemporary Philosophy*, published in 1921, he makes an interesting allusion to this period of his life, taking occasion definitely to repudiate the idea that even the most enlightened Ethics founding itself on the idea of progress as commonly understood could ever be a satisfying creed or do the work of religion. But looking back on these days and on the aim which this particular Society set before itself of bringing the best thought of the universities into touch with civic problems both of theory and practice, the time spent upon it by him and others seems to me to have been justified in the result. Bosanquet once remarked on the effect that bringing William Wallace to lecture for it to a popular audience in East London had upon the secluded scholar in making him feel his own power as a speaker. The same, I think, might be said of Bosanquet himself. In his case it had the further effect of inducing him to undertake courses under ordinary University Extension conditions in subjects hitherto mainly confined to college class rooms. Some of the best of his own books including the *Essentials of Logic* and the *Companion to Plato's Republic for English Readers* were the outcome of these courses. I can remember the delight with which he reported, after the conclusion of a course on educational Psychology, that he had been asked by a member of the class whether he would not follow it with a course on "real psychology".

Another meeting ground of philosophers in London in those days was the recently formed Aristotelian Society with Shadworth Hodgson for its President and H. Wildon Carr as Honorary Secretary. Professor Carr in his memorial paper *Some Personal Recollections* has given some interesting reminiscences of the origin of the Society and of Bosanquet's early connexion with it. He valued it particularly for the opportunity it offered of meeting men of different experience and different philosophical methods from his own. On the retirement of Shadworth Hodgson in 1894 he was elected to succeed him in the Presidency.

In 1895 he married Miss Helen Dendy then engaged in work for the Charity Organisation Society in East London, but already known for her translation of Sigwart's *Logic*. In reply to a letter congratulating him upon his engagement he wrote that they had every chance of happiness as "they played the same games".

In 1903 he accepted the appointment to the Chair of Moral Philosophy then vacant in the University of St. Andrews, and held it for five years. Until he removed in the last year of his life to Golders Green he spent the intervening years in his delightful cottage at Oxshott in Surrey, next door to his old friend Sir Charles Loch. After 1897, when I left London, I saw him comparatively seldom. He came, however, to Birmingham on one occasion to receive the LL.D. degree among a distinguished group selected to be the first recipients of honorary degrees from the new University in that city, and on more than one to lecture to the Socratic Society.¹

The last correspondence I had with him was in connexion with his paper for the volume about to be published on Contemporary Philosophy, in which each of the writers has been asked to state what he regards as the fundamental problem of philosophy and how he was led to his own particular views upon it. By a fortunate chance he was the first to whom I wrote, and he was the first to reply with the article there printed. What he there says as to the circumstances that were the leading influences in the formation of his philosophical opinions is of the greatest interest and I have ventured to make use of it in the latter part of this notice. Though not the last words he wrote for publication, it contains a personal note not elsewhere to be found in his writings, and may be said to constitute his last will and testament to his contemporaries.

By the kindness of Mrs. Bosanquet the volume referred to contains the completest list available of Bosanquet's books and articles. If this were repeated here it would fill more than a page of the space allotted to me. It bears witness to the unintermittent devotion with which one of the finest minds of our time has laboured to express a philosophical view which he regarded as of the profoundest practical and

¹ On one of these occasions his lecture was on the "Definition of a Gentleman". He defined him characteristically as the man who is always precisely equal to the occasion. I have forgotten the details of the lecture but remember how when we arrived home after it and found the door shut and the maid-servants in bed, he illustrated his thesis by picking up a handful of loose gravel and skilfully throwing it at their window in the top flat, wakening them with the gentlest of taps.

theoretic importance. Of the work of few of the present generation can it be said with so much truth as of his: *stat mole sua*.

In the first of the three posthumous chapters on the *Nature of Mind*, Bosanquet quotes with approval "the man is the sphere which his activity doth fill," and in the same chapter he writes of a man's works that they are "what the man succeeded throughout hard and confusing conditions in grasping and rescuing from chaos one by one and piece by piece into their several pure and splendid forms". He adds, "it is in the works we must look for the fulness of the man not in the man for a greater fullness than that of the works". Though he is thinking primarily of poets and heroes the words are true of philosophers, and in a peculiar degree of himself.

In trying to sketch "the sphere that his activity did fill," I shall speak in the first place of the principle from which he took his departure and which was the central light of all his seeing. Secondly, I shall speak of the things which by aid of it he may be said to have succeeded in "grasping and rescuing from chaos into pure and splendid forms". Lastly, though my object is not criticism, I shall refer to one fundamental point which, overborne it may be by the "hard and confusing conditions" of the problem, he seems to me to have left in some obscurity.

Bosanquet was one of the brilliant group of students of philosophy who in the early 'seventies came under the influence of Green and Caird. But already thought was moving beyond the form in which these teachers had stated the fundamental principle of Idealism. The "mutual implication of subject and object," the ultimateness and all-inclusiveness of "self-consciousness," "the identity of thought and reality" were felt to be not so much false as ambiguous. What Bosanquet set himself to do was to free what seemed to him essential from what he thought accidental in Green's method of statement. The gist of Green's doctrine he held to be not that the relating activity of mind in knowledge pointed to a similar relating activity in a universal consciousness, but that the human mind is capable of apprehending a whole, and does, in fact, apprehend the world as a whole, however imperfectly; and further, that the world is thus apprehended in its real character. As a true whole it must be a system or something closer than a system, all-inclusive and thoroughly one.¹ Bosanquet never claimed any originality in this re-

¹ Art. "Recent Criticism of Green's Ethics," *Arist. Soc. Proc.*, 1902.

statement of the fundamental principle of Idealism. He always spoke of it as the achievement of F. H. Bradley,¹ though he held also that what Bradley had done was merely to open our eyes to see what had been the real burden of all the great philosophies from Plato to the present time. He came more and more to recognise it as providing the general framework within which all true philosophy must henceforth fall—the “plan” as he calls it “which the great masters had handed over to be carried out piece-meal by the journeymen”.² His own inmost ambition, he tells us in a striking passage, was to be able to say to the critics of Absolutism “mark now how a plain tale shall put you down”.³ It was, indeed, in his criticism of the strong reaction which had already set in against it, particularly in the “New Realism,” that we have to look for the clearest restatement of the Idealist doctrine as to the nature of mind and thought and their relation to reality.

Realism he held had succeeded, in the best of its modern representatives, in freeing itself from all taint of materialism. On the other hand by its minimising treatment of mind in the theory of “compresence” it seemed to him to have committed itself to a view that was not less a falsification of the true nature of thought and its relation to things. His argument, it need hardly be said, was not founded on any immediacy or priority of the subjective to the objective but on the nature of mind as *ab initio* a whole of which the object is a part—a *world* in which all objects take and hold their place in virtue of their essential relativity. “I should compare my consciousness,” he writes, “to an atmosphere not to a thing at all”.⁴ The New Realism in general, he held, had taken too narrow a view of what we mean in so far as it identified it with the world of perception which is at best but a fraction of what we regard as real. But even on its own ground the “plain tale” could put it down. In the most elementary of our experiences (in the sensation for instance of blue), what we have is no mere object on the one hand, act of attention on the other. What we have is an “effect,” something appreciated in its world of colour. Cut

¹ The debt was not merely on one side. Few things are more illuminating as to the relation of those two men to each other than Bosanquet's remarks on the dualistic tendency of *The Principles of Logic* in his book on *Knowledge and Reality*. Mr. Bradley's acknowledgments of what he owes to his criticisms and to his constructive work in logic are frequent in his new edition of the *Principles*.

² *Mind and its Object*, p. 55.

³ *Principle of Individuality and Value*, Preface.

⁴ *The Distinction between Mind and its Object* (1913), p. 27.

it down as you will, you cannot shut out the atmosphere which it owes to mind, and which makes it what it is. This is granted by Critical Realism, but in granting it Critical Realism had committed itself to a sliding plane. In the end it is met with a mere "that"—the form of an object without the power—seeing that it is a "that" which has no "what" and a "what" which has in principle no "that". The existent is the object of knowledge but there is nothing to know. Asserting mind and its object each as absolute you end by having neither.¹

But it is in the world into which thought and the universals which are its medium enter on their own right that mind displays most fully its true nature. It is difficult to condense without evaporating a doctrine that meant so much to Bosanquet as that of the "concrete universal". Essentially it consists of two points distinguishing it severally from conceptualism and realism. To the conceptualist it opposes the familiar Hegelian view of the universal (triangle, justice, state, etc.) as a real identity in difference, the same principle displaying itself in the properties of the particular instance with differences which remain its own. It is general, of course, in virtue of its abstractness but generality is not of the essence of it. The essence is the determinateness of the relations within the system signified by the term: the triangle, the man, the state. How this view of the nature of the universal is related to the so-called abstract universal of the class was left by Bosanquet I think somewhat obscure. What he would have certainly rejected was any theory, even of the abstract universal, which sought to dispense with the idea of *identical structure*.² To the Realist to whom the universal is merely a dead object external to the mind, Bosanquet opposes the view that it is a living force which finds in the mind the instrument of its self-development or (if this is itself too suggestive of externality) which constitutes at once the essence of mind and the vital pulse of reality.

"All thought," he held, "is the self-maintenance of universals and every universal is on one side a creation. Every universal is a growing creature".³ He was thus led to a view of thought the very reverse of that which (whether in

¹ *The Meeting of Extremes in Contemporary Philosophy*, p. 136.

² Professor Stout has in more than one place tried to harmonise the principle of identity with a workable theory of the abstract universal. See *Hertz Lecture* for the British Academy and cp. *Relativity, Logic and Mysticism* (1923), p. 114, foll.

³ *Three Chapters on the Nature of Mind*, p. 66.

realist or idealist) opposes its constructions to the concrete realities of perception. So far from being something that merely goes on in our minds "a sort of angel inside the mind" or "a peculiar stuff or medium with qualities like a kind of magic mirror" it is the stuff of *reality taking control*, the "self assertion of reality according to its characteristic laws within a complex of psychical matter which may be called the mind. The operation in a word whereby the growing and coherent body of experience governs our psychical processes is what we mean by thought".¹

A doctrine like this is clearly no facile Idealism. It seems doubtful whether Idealism is the proper name for it at all. If it is, we see Idealism here putting off the last vestiges of mentalism and instead of mind being conceived of as in any sense creating reality, reality is recognised as the living pulse of mind. As the idea developed in Bosanquet's own mind we find a growing hesitation to employ the word "mind" at all. "What thinks," he says in his last written chapters, "... is myself rather than my mind and it is myself that thinks because it is the living and growing real which I have built up and am building up *par excellence* as my world." Judgment and inference on this view emerge at the point where "the organised and persistent object built up as the centre of my standing self" takes charge and by its selection of what is consistent with itself and its rejection of what considering the whole situation is inconsistent with it moves forward to fuller self-expression. If it be objected that this leaves no room for freedom Bosanquet had his swift and decisive reply: "He who talks of freedom and excludes thought knows not what he says".²

The work of Bosanquet's literary life may be said to fall into three more or less clearly marked periods: an earlier in which he was occupied mainly with Logic; a middle in which ethics and aesthetics claimed his chief interest; and a later in which he was mainly preoccupied with the implications of Absolutism in the field of religion.

We can understand how to one who had seized the significance of the principle of totality the work to which the "journeyman" was called was to exhibit its operation in detail in the different fields of experience and was thus in a wide sense logical. But we can understand also how Logic in the narrower sense, as the science of the processes whereby reality obtains in the medium of mind the ideal expression we call truth, seemed to have the first claim upon him.

¹*Op. cit.*, pp. 72 and 157.

²*Op. cit.*, p. 75.

It is difficult for the present generation to realise the chaos that prevailed in this department in the 'seventies. It was not so much, as has been said of it, that it was a time when "every man did what was right in his own eyes" as that no one was doing anything at all. On the one hand there lay the old syllogistic logic still confusedly clinging to the idea of necessary connexion, emaciated as that had become in the hands of Jevons to the merely formal principle of identity. On the other hand there was the elaborate structure of an empirical logic that sought to found inference on similarity and the association of particulars. Already in the lectures of Green these dead bones were being stirred to new life, and the work that he had begun was carried out with fresh power by Bradley's criticism at once of syllogistic and inductive inference as then understood. Bosanquet was always eager to recognise his debt to these and other writers in *Logic* (particularly to Lotze), but there is no reason to believe that the whole conception of the form of his work and the inspiration with which it was carried to completion were anything but his own. He has himself explicitly told us what his aim in his *Logic*¹ was: namely to sweep away the whole conception of linear inference whether upward through instances as in Induction or downward through universals as in syllogism as resting on what he called "a deep foundation of imperfect logic," and to substitute the idea of system, coherence, or place in a totality as the real nerve of the process whereby we "can know one thing by knowing another". On the other hand he has admitted that at the time he wrote his main work he imperfectly realised "the plot and spirit which made the story of inference a new thing". It was this that he sought to underline in his later book.² Taking them together what I think may be claimed for them is that they embody a view of the nature of inference bound sooner or later to revolutionise the entire science of logic. Instead of conceiving the ground of inference to consist either of instances however purified, assumed contrary to all evidence to be perfectly determinate, or of *a priori* principles of implication invented *ad hoc*, the logic of the future will conceive of it as consisting in "the subject or universe of discourse itself as a concrete whole of experience, pressing on the mind with all the force of reality and moulding it to itself".

In an as yet unpublished article Bosanquet has spoken of

¹ *Logic or the Morphology of Knowledge*, Oxford, 1888.

² *Implication and Linear Inference* (1920); v. pp. 43 and 115 n.

the publication of Bradley's *Ethical Studies* in 1876 as for himself and others an epoch-making event. It seemed to him important not only because it had "restated and concluded" the discussion of Hedonism but because it furnished the basis for an entirely new interpretation of Kantian Ethics, and he expresses surprise that its philosophical implications have remained to this day so imperfectly realised. It was probably partly because he felt that the work had been here so thoroughly done that, although much preoccupied in the 'eighties and 'nineties with Ethics,¹ he never himself attempted any systematic treatment of ethical philosophy. His views are to be gathered chiefly from his *Companion to Plato's Republic* from his *Essays and Addresses* and from the little book *Some Suggestions in Ethics* published in 1918. What interested him I think mainly was the extension of the idea of the moral good, in the spirit of Plato, so as to include non-personal objects such as beauty and truth. The problem seemed to him no longer how to reconcile pleasure with duty, egoism with altruism, but to reach a point of view from which these opposites should appear subordinate elements in the totality of human good. As with the theoretical so with the practical problem: "Given an initial self and surroundings the problem is to find or construct a life which will do justice to them, which will reveal all the values that can be found in them which will 'meet' and 'do justice to the situation'".² It was here he found the essential truth of the Socratic conception of the knowledge of the good, giving to goodness the force of an overmastering professional enthusiasm comparable to that of the trained craftsman. "The identification of goodness with the trained and formed character, skilled and enthusiastic in realising the ideal self which is the whole," he wrote, "has always been my delight; and I hold any intellectualist interpretation of Socrates' and Plato's meaning to be an anachronism and a blunder."³

This, combined with his conviction that Green's doctrine of the General Will required re-emphasis, in view of modern controversies, was probably the reason why so much of his attention was devoted at this time to political theory. He has himself, in the same article, told us how, stimulated by the ideas of Green, Arnold Toynbee, and C. S. Loch, it came upon him as "a compelling and inevitable task to draw out the nature of the will and the art of living together, so as

¹ See above, p. 394.

² *Suggestions*, p. 180.

³ Art. on "Life and Philosophy" shortly to appear in *Contemporary Philosophy*.

to place them in relation with other forms of spiritual being and exhibit the comparatively incoherent and artificial nature of those doctrines of 'the first look' on which individualism and pseudo-sovereignty rest," and how readily this task "connected itself with other endeavours to exhibit truth and reality in the light of the criterion which is the positive non-contradictory whole". To him it was merely a part of the "plain tale" that all corporate life is the outcome of and depends upon the operation in countless wills of the idea of a corporate whole which claims their allegiance. The essence of his doctrine was not the existence of a super-will with the right to dominate over and suppress the wills of individuals, but the simple fact that what gives the will of the individual its power for good is the support it gets from the confluence of co-operating wills which sustain the social fabric and give more or less conscious direction to social purpose. Such corporate will there is no more absurdity in designating the 'real' will of society than there is in speaking of conscience as the voice of the real man. Nor is it any more possible in the one case than in the other to resolve it into a mere aggregate or precipitate of particular wills. Rather, it has the air of something new, "of something that comes out of the co-operation of individuals but reveals a fresh character in them and exhibits them as something which *qua* mere units, set side by side, they would not appear to be".¹ If Bosanquet seemed to lay too much stress on the embodiment of this will in separate States it was because of his profound belief that the first indispensable discipline of the temper and habits, out of which larger unions could alone spring, was that which an organised political unity could alone effectively supply. He held with Green that there is no other enthusiasm of humanity than that of the good citizen and honest neighbour, and can never forget that it is merely a further stage on the same road.

If this article aimed at giving a complete record of Bosanquet's work, far more than a short paragraph would be due to his æsthetic writings. There was none of us who was more deeply influenced in those days by the teaching of Ruskin and William Morris or more clearly recognised what he has called the "profound speculative interest" of æsthetic experience. In beauty he saw the very type of the higher unity. Here universal and particular, freedom and necessity, the spiritual and the natural, met and kissed each other. In no other sphere were the new ideas more significant of

¹ *Suggestions in Ethics*, p. 36.

coming revolution. In the light of them he held that "the whole apparatus of traditional dualism became, in principle, once and for ever obsolete. This world and the other, the *a posteriori* and the *a priori*, the natural and the supernatural with all their family, taken as signifying antithetical realms of being and experience, were for the future idle tales."¹ This was the view that seemed to him illustrated in the history of æsthetic philosophy,² and that he pressed against what he considered the half truths of contemporary theories. In particular, it was their failure to realise its depth and import that seemed to him to be the condemnation of such theories as that of Benedetto Croce.

More universal interests were touched by the endeavour in the later portion of his life to carry out his central principle in the interpretation of the religious consciousness. He felt keenly the complexity of the issues that were raised in this field of modern philosophy, which offered so much that it could hardly hope to establish. But here also he held there might be a "plain tale" sufficient for men's real needs and capable of demonstration as "the reasonable faith of resolute and open-minded men".³

It seemed possible, at any rate, to make clear in harmony with his central principle wherein the supreme values lay and what was the condition of realising them. If it was true that the dynamic principle in things was the *nisus* towards internal coherence, and the individuality and stability which were other words for it, it followed that the principle of value and satisfactoriness could be no other than this. Experience has value in proportion as the fulness of the whole finds harmonious expression in it. What is of supreme concern is not our separate individuality, but the completeness and concordancy of the experience that reveals itself under the psychical conditions we experience in finite selfhood. In the general spirit of the revolution which he sought to effect in the way of conceiving of the soul's life Bosanquet asks us to think of the Absolute, not as something remote and transcendent but as "the high water mark of an effort in which our minds actually consist and have their being, fluctuating in the successfulness of the effort with

¹ "Life and Philosophy."

² As the present writer was in a sense responsible for the *History of Æsthetic* in the Library of Philosophy it is perhaps not for him to complain that to so many philosophical students this book seems still to remain an unexplored mine of sound and suggestive criticism.

³ See *Principle of Individuality and Value*, Preface *init.* and p. 30.

everyday experience"; and of each self as "more like a rising and falling tide which covers a wider area as it is deeper at the deepest point, than like an isolated pillar with a fixed circumference". It follows from this that the important thing is not the number of centres of experience, but the variety of levels; and the problem of the one and the many is not to reconcile a multiplicity of substantive reals with the singleness of the supreme reality, but how to reconcile differences of level with the conception of a highest which includes and represents them all.¹

In harmony with this was his view of progress as the result of the working in the spirit of man of the spirit of the whole. "The principle of progress," he held, "is in the will itself." "The occasions for progress can never fail." What is defective in the current philosophy of progress is not the reliance on the continuity of an onward movement but the reliance on the *future* to fulfil the promise of the present. "The reliance on the future," he writes, "has become it seems to me an actual disease."² He was unwilling to admit even a theory of momentary attainment combined with an infinite progress. Such a view left us still at the level of morality, the distinguishing feature of which, as contrasted with religion or what lay beyond religion, was just the unsatisfyingness of this false infinite. "The test," he declared, "of a philosophy of progress is, I am convinced, to reconcile the sense of creative achievement in the self, as promotion of the good cause, with its recognition and acceptance of a perfection, which is not won by its own finite activity though represented in it—in shorter phrase to reconcile the attitudes and postulates of morality and of religion."³ The reconciliation can only come by abandoning the linear idea of progress and by substituting for it the idea of progress in "a solid and tridimensional"⁴ sense, as a continuous revelation of abiding forms. Its failure here seemed to him the condemnation of the "new idealism". It fails to "recognise what seem to others the obvious indications that an infinite source of values is bursting forth on every side and in every direction; and that in all advances, in which the finite selects and continues this and that special career, something is being abandoned by the selective movement of finiteness which was essential to the total revelation". It is inconceivable that what he calls "the constricted channel of a finite

¹ *Value and Destiny of the Individual*, p. 295.

² *Op. cit.*, p. 295.

³ *Op. cit.*, p. 296.

⁴ Quoted *op. cit.*, p. 325, with approval from William James.

history"¹ can ever be the adequate vehicle of the fulness of the whole.

The recognition, implied in such a view, of the universe as "the magnificent theatre of all the wealth of life" and as that within which all that is finite falls is to be identified neither with philosophy nor with religion. It is not philosophy; rather it is something of which we are all aware when we are at our best, "our common sense of an inclusive world to which philosophy as a reflective theory corresponds". It is not religion; rather it is something, within which religion itself is a feature or characteristic, and which is needed to widen and sweeten it by forbidding its components to harden into mere antagonistic factors. For "here too the whole, the inclusive and all permeating world, is the ultimate watchword of our theory".²

If those who are most in sympathy with Bosanquet try to analyse what they feel in the presence of his life work they have I think the sense of a great mode of philosophising instinct with the spirit of a strong and striking personality. Hegelian Idealism originally expounded by Green and Caird, reinterpreted by Bradley and carried into every field with a fine insight into what the modern world requires of it by Bosanquet, will surely stand for a great chapter in the history of philosophy. This is not the place—perhaps the time is not yet come—for a critical estimate of its general significance. Yet there is something that may here be said not so much by way of criticism, as to explain the ground of the criticism which has been directed by writers, who reckon themselves in general as of the same household as Bosanquet, against the later developments of idealistic doctrine with which he is particularly identified.

Readers of MIND are familiar with the course of the movement just referred to. Its starting-point may be said to have been Green's teaching as to the relating activity of thought in the construction of the world we hold to be real. Taking his departure from a more thorough-paced Hegelianism, Caird carried this further by his emphasis on self-conscious intelligence as the inclusive principle which holds all relations in solution and assures us of the ultimate unity of knowledge and reality. Following upon this was the stress laid by both on moral achievement and the stability it gives to personality as the ultimate criterion of reality and value.

¹ *The Meeting of Extremes in Contemporary Philosophy*, p. 207.

² *Value and Destiny*, p. 312.

Nothing could be clearer or more emphatically stated than this in Green. "All values," he wrote, "are relative to value for, of and in persons." "When that which is being developed is itself a self-conscious subject the end of its becoming must really exist not merely *for* but *in* and *as* a self-conscious subject." Across this whole line of thought came the apparently withering criticism of *Appearance and Reality*, convicting relations of self-contradiction and rejecting the claim of personality, as we know it in finite subjects, to any ultimate value. Of his sympathy with Bradley's view Bosanquet has left us in no doubt. "I cannot believe," he has declared, "that the supreme end of the Absolute is to give rise to beings such as I experience myself to be."¹ But he felt and was always ready to express his indebtedness to Green. Nothing is more admirable in him than the loyalty with which he always speaks of the older thinker, and which made him loth to admit any final inconsistency between his teaching and that which he had learned to value in Bradley. Faced with the apparent contradiction on so fundamental a point he meets it characteristically in a well-known passage² by finding the spirit of the later teaching if not its actual letter in the earlier. What is essential in Green, he suggests is "not primarily that the goal of development should be our personality but that it should be *a* personality". Even the whole idea of personality might have been consistently admitted by Green to be a subordinate element in a Whole, which is supra-personal.

Most students of Green must have felt that there is something strained in this interpretation and that it leaves them with a sense of something dropped out. Even writers otherwise in entire sympathy with Bosanquet's central contention have preferred to press the incompatibility of the doctrine of personality found in the older Idealism with Bradley's conception of the Absolute. The principle of totality as the clue to the nature of reality and our knowledge of it is not questioned. What is questioned is an interpretation of it which brings it into sharp antagonism with the claims of personality—among other things foreclosing, as to all intents and purposes it does, the case for personal survival in all its forms.

Into the details of this controversy I have no intention of here entering. The battle has recently been fought upon the heights in the symposium on the alleged adjectival character

¹ *Life and Individuality* (Arist. Soc. Proc.), 1913.

² *Value and Destiny*, pp. 277 foll.

of finite individuals,¹ and in Sir Henry Jones's *Faith that Enquires*, where attention is drawn to the disturbing emphasis in Bosanquet upon the negative movement of self-transcendence in contrast to the positive of self-realisation. I do not think that it can be denied that Bosanquet has exposed himself to criticism by the form of his thesis and by a certain overemphasis on what he has called the "positive incoherence, self-rejection and self-contradiction of finite personality". But I think also that in his doctrine of the relation of the Absolute to finite experience, as we have found it in his more constructive statements, he has himself indicated another line of interpretation. Even in the controversial paper just quoted he declares that so far as the "provisional individual" is apprehended in its true place and in unity with the superior whole "it is or would be real" and that "so apprehended it may fairly be called substantial". But I lay no stress on this suggestion of a conciliation between him and his critics. Likely enough Bosanquet would himself have repudiated it. Idealism, I believe, as a comprehensive philosophy, owes more to him than to any other present day writer, but there is much in his work which raises a doubt as to whether it has there reached a position of stable equilibrium. One thing is not open to doubt. If any one had told him that he had left a set of problems to solve rather than a set of doctrines to hold, he would have replied that that and not the other is precisely what he would have most desired.

¹ *Life and Individuality*, quoted above.

II.—MR. KEYNES ON PROBABILITY.

BY H. W. B. JOSEPH.

MR. KEYNES has written a treatise on Probability, of which I would say, if only it had explained to me the meaning of saying so, that it will probably not for many years be superseded. It has great merits. It rests on a vast reading of what has been written upon the subject both by those who have considered the philosophical problems which the notion involves, and by those who have devoted themselves, on the mathematical side, to the calculus of something, whose nature they have left in comparative obscurity. He writes as a competent mathematician, with the mastery of symbolical expression thence derived. And his keen critical ability enables him to detect and expose many illusions which have flourished in this field. In many passages, as for example in what is said upon the impossibility of measuring many, or perhaps most, probabilities, and upon the application of probability to conduct, there seems to me to be much that is excellently true; and the whole is presented with great literary skill. All the more important is it, that the work should not pass unscrutinised; there is danger that the very massiveness of Mr. Keynes's achievement, the many merits of the treatise, and the difficulty of producing any even approximately as comprehensive that will not be in many ways inferior to it, may lead slowly to a general acquiescence in the account that it gives of so difficult and important a subject. For I do not believe that, in some of its main philosophical positions, it can be sustained. In this paper I propose to examine some of these.

I wish to consider, first, what in general Mr. Keynes holds that probability is, and the relation between it and knowledge; and secondly, his view that the theory of probable inference is the general, or fundamental, theory of inference: necessary inference being only a special case. In this regard, I shall call in question particularly the doctrines that the Law of Contradiction is one of the theorems which can be established

by the theory of inference, and that inductive arguments do not require among their premises the assertion of law, or necessary connexion.

First, then, what is probability? Mr. Keynes holds that it is indefinable. The most promising attempt at defining it is that of the so-called Frequency theory. According to this, to say that *a* is more probable than *b* means that instances of *a* are more numerous than of *b*; to say that the probability of *a* is $\frac{1}{2}$ means that in the class of events to which it belongs, instances of *a* are 50 per cent. But this view is difficult to apply to the probability of that which is not an instance of a recurring event; and some of the fundamental theorems of the calculus or comparison of probabilities cannot, Mr. Keynes says, be proved for it. He therefore rejects the Frequency theory, and treats probability as an ultimate and indefinable notion. But he does not think we can say nothing about it. We may describe it, as 'a logical relation between two sets of propositions,' when it is not possible to argue demonstratively from one to the other (Ch. I., § 8).

There are three points in this description which deserve attention: (1) that probability is held to be not a character of anything considered by itself, but a relation of one something to another; (2) that this relation is not between events, or reals, but between propositions; and (3) that it is between sets of propositions, rather than between single propositions.

That probability is a relation, a relation between some conclusion and its evidence, Mr. Keynes holds it very important to recognise. He introduces the recognition of it into his symbolism; and he criticises J. S. Mill for overlooking this relativity of all inductive arguments to the evidence (XXIII., § 3). Mill says that the induction that all swans are white could not have been a good one, because experience afterwards upset it. But relatively to the evidence on which it was founded it was, Mr. Keynes urges, quite good; though it would not be equally good relatively to other evidence, available later, which included the proposition that a given swan had been black. One might be inclined to defend Mill by saying that what he meant by a good induction was one that reaches truth. But we shall understand Mr. Keynes's criticism better if we ask whether the belief that all swans are white was upon the evidence a rational belief. Mill would not, I suppose, have denied this; he would only have said that it was not rational, on the evidence, to do more than believe it: not rational to hold it proved. He desired to find what sort of evidence justifies us in regarding a generalisation as proved; and the discovery of a black swan

undoubtedly showed that any one had been in error who thought that the experience previously available about swans justified the generalisation that all swans are white.

Now why does Mr. Keynes not see this, or seeing it why is he still dissatisfied with Mill? I think the reason lies in his view of knowledge, and its objects. In a curious passage (I., § 8) he speaks of passing from the logic of implication and the categories of truth and falsehood to the logic of probability 'and the categories of knowledge, ignorance, and rational belief'. Knowledge is on the same scale with belief; it is not different in kind; and its object is of the same kind with that of belief. The object of belief is a probability-relation, having a certain value between 0 and 1; the object of knowledge is a similar relation, whose value is that of certainty, or 1. These probability-relations are objective; and they hold (with a reservation which we shall have to consider presently) between any two propositions, or sets of propositions. Hence, relatively to the evidence on which it was based, the induction that all swans are white really had a certain probability, and so was a good one. It is not only that the *belief* was probable. Mr. Keynes regards belief as a proper subject of the predicate 'probable'; but he derives the sense of the word, in which it is applicable to a belief, from a more fundamental sense in which it is applied to a logical relation between propositions. And certainty is a limiting degree of belief; but this is logical certainty, which he distinguishes from psychological certainty, because derived from this relation that is independent of our beliefs; so that to logical certainty there corresponds a limiting degree of the probability-relation. That is the object of knowledge. But all degrees of probability-relation exist, not of course between the same propositions. All therefore should be recognised, and the inductions which lead to the recognition of them are good.

Let us look a little more closely at what Mr. Keynes has to say about knowledge and its objects. We are to admit, first of all, a direct acquaintance with certain things. These are of three kinds: sensations, which we experience; ideas or meanings, which we understand; and facts or characteristics or relations of sense-data or meanings, which we perceive (II., § 6). This is, I think, a cross-division; for from the examples in the next section it appears that to understand a meaning—the meaning of 'yellow,' or 'colour,' or 'existence'—is to understand what is meant by a word; and what is meant by a word may be a sensation, or may be some 'fact or characteristic or relation' of a sense-datum;

when, for example, I perceive an implication between two propositions, I perceive a relation; but this relation is the meaning of the words '*p* implies *q*,' so that to understand the meaning is to perceive the relation. Shall we say then that to understand meanings is to understand not what is meant, but the meaning it, the relation which to mean is, which words bear to what they stand for? This will hardly do: for what Mr. Keynes says 'we may be said to understand' are 'the ideas or meanings, about which we have thoughts'. What we have thoughts about is what is meant by our words, not their meaning this. Probably his intention is to distinguish between sensations, which I experience when I see a colour or hear a sound, and ideas which I in some way apprehend when I understand the meaning of the word 'yellow' or 'shrill' without at the moment seeing a colour or hearing a sound. Ideas or meanings in fact are the so-called mental images. But what 'yellow' means is not any mental image that I may form when I think of yellow; it is the sensible colour itself. When I think of the colour of my copy of Mr. Keynes's book, I am thinking of it, not of my idea of it; even if my thinking of it is accompanied with mental imagery, the imagery is no more what I am thinking of than words are when I use them in thinking. However, it is more important for our purposes to note that there is direct acquaintance than to criticise the classification offered of the objects of direct acquaintance.

And then 'by some mental process of which it is difficult to give an account' we pass from this direct acquaintance with things 'to a knowledge of propositions about the things of which we have sensations or understand the meaning.' I feel a difficulty here again. The things of which we understand the meaning cannot be the meanings we understand. They may be words, or they may be ideas = mental images; for the function of these is to help us to think of something else, as words do. But so few of our propositions are about words or mental images, that such propositions hardly call for special mention. Mr. Keynes was probably not intending to mention them; but I am not clear what he did intend. And then further, 'by the contemplation of propositions of which we have direct knowledge, we are able to pass indirectly to knowledge of or about other propositions.'

This account makes the objects of knowledge—at least of such knowledge as is not direct acquaintance—propositions. Surely that is false, and it is time to say so. Propositions are not objects of knowledge, but express our knowledge of something else. What is here called contemplating a

proposition surely is contemplating certain objects of thought to which the words of the proposition direct our attention. That we cannot do this without words is true; τὰ γὰρ ἁσώματα, κάλλιστα ὄντα καὶ μέγιστα, λόγω μόνῳ ἄλλῳ δὲ οὐδενὶ δείκνυνται. I know that I may be asked here what the object of my thought is when I entertain a supposition, or a false belief. If it is nothing real, what is there but the proposition to contemplate? The proposition, I may be told, is not the words which express the object of my contemplation, but is itself expressed by them, and is to be distinguished both from them and from what exists. It may be true or false, but either way it is; and furnishes me with an object of contemplation in supposition or in error. This doctrine, though supported by names of weight, seems to me untrue. I admit the difficulty which it is intended to meet; but whatever the solution of it may be, it can hardly be this. For if propositions, in this sense of the word, are the objects of thought in supposing and erring, they will be so in knowing also. Mr. Keynes indeed holds that they are; for the logical relations which we apprehend in knowledge are, as he teaches, relations between one proposition, or set of propositions, and another. But then we are cut off from any knowledge of reality. We shall never know the real relations between one existent and another, nor that the logical relations between our propositions correspond thereto.

If I am right in rejecting in principle the doctrine that the objects of knowledge are these propositions, it may seem superfluous to criticise any details in it. Nevertheless there is a detail about which I should like to say something, because it seems to me to illustrate a certain laxity in the use of symbols, from which those who claim to use a rigorous symbolic method are not always exempt. Mr. Keynes distinguishes knowledge *of* a proposition, and knowledge *about* it. When I know a proposition *h*, and that another proposition *p* has a probability-relation to *h* less than certainty, then I have knowledge *about p*; but if the degree of my rational belief in *p* is that of certainty, I have knowledge *of p*. This, I think, will hardly stand. It may remind a reader of the Aristotelian contrast (*Metaph. θ. x*) between the apprehension of essences, into which no distinction of subject and predicate, no discursive movement of thought enters, so that I must as it were hit or miss the essence, and knowledge which involves the subject-attribute distinction, so that while I apprehend the terms, I may be mistaken about their relation. But this distinction is not transferable to the present case, as will appear if we substitute some real value for our symbol. If I

really have knowledge of p —if I know, say, that ‘the number 3428 is the sum of two primes,’ my knowledge is of a certain relation of numbers (this includes, of course, knowing the numbers related); it is *about* the number 3428. But if, on the ground that every even number less than 3428 is the sum of two primes, I have a rational belief less than certainty that 3428 is so—which, in Mr. Keynes’s symbolism, would be to have knowledge about p —this is knowledge neither of nor about what I had knowledge of or about before; it is knowledge that my knowledge of certain other facts does not by itself suffice to determine a question about 3428, though it may incline me to believe, and perhaps reasonably to believe, a certain answer to the question. I cannot have knowledge about anything, without apprehending that thing. Now p , about which I am said to have knowledge in this case, stands for the proposition ‘3428 is the sum of two primes’. I do not know this, *ex hypothesi*; and therefore I can know nothing about it. And on the other hypothesis, that I do know that 3428 is the sum of two primes, what I have knowledge of is the real relation between that number and the sum of two primes; what I have knowledge about is 3428; and p symbolises neither that real relation, nor 3428. Mr. Keynes’s use of p to symbolise both that which I am said to have knowledge about, in the probable belief, and that which I am said to have knowledge of, in certainty, seems little better than the crude language of some text-books of formal logic, when they teach that in propositions symbolisable as ‘ x is y ’ and ‘ x may be y ,’ x and y can have the same values and still symbolise the real subject and predicate of each.

This, however, is but a by-point. The main doctrine is that the objects of knowledge are propositions. Propositions are also the objects of probable belief. And my contention is that Mr. Keynes does not allow room for any distinction between belief and knowledge. We are indeed told (II., § 1) that ‘rational belief, of whatever degree, can only arise out of knowledge;’ but that means that in order to have a rational belief in p , I must know something else, and the emphasis in the passage is rather on the distinction between conclusion and premisses, than between *believing* the one and *knowing* the other. And elsewhere it is said that logical proof increases the certainty of knowledge which without it we might be able to possess in a more doubtful manner (IV., § 12, p. 53, n. 1). Evidence again may justify ‘a certain degree of knowledge’ (III., § 12), as it might have been said ‘a certain degree of belief’. In one place, it is true, where Mr. Keynes speaks of knowing a conclusion with the

appropriate degree of probability (XI., § 1), he substitutes a 'stricter' expression in a footnote, which avoids this phrase. But the passages in which probable knowledge is mentioned are so frequent, that it is difficult to regard them all as marks of mere carelessness or brachylogy. And, whatever may be the case with 'direct knowledge,' Mr. Keynes holds that certainty of inference, and therefore all knowledge involving inference, is a particular case of that whose general nature the principles of probable inference reveal; that 'the laws of inference are the laws of probability, and that the former is a particular case of the latter' (XI., § 14).

What then of 'direct knowledge'? I confess that I am much puzzled about Mr. Keynes' view of it. He seems to say that I can believe and directly know the same thing. He distinguishes between 'that part of our rational belief which is based on direct knowledge, and that part which is based on argument'. These words ought to mean that there are beliefs of two classes, standing in the same relation respectively,—the one to direct knowledge, the other to argument: this relation being indicated by the words 'based on'. Now a belief based on argument is one which I hold in virtue of argument, *i.e.*, in virtue of apprehending its relation to certain premisses, known or believed; and I can distinguish the knowledge or belief of these premisses from the belief in which the argument assures me. In another sense indeed I might say this belief is based not on the argument but on the premisses. A belief based on knowledge should accordingly be one which I hold in virtue of knowing it. But here there is no distinction between what is known and what is believed; there is nothing to correspond either to the relation which belief in a conclusion bears to the argument in which it is reached, or to the relation which the conclusion bears to its premisses. What relation then is indicated here by the words 'based on'? One might suggest that 'direct knowledge' means 'direct acquaintance'; I might have direct acquaintance with daytime; this daytime would be a sensation, or an idea, or a fact characteristic or relation of a sensation or idea (I am not prepared to say which); and based on this I have a rational belief not in daytime, but in the proposition 'it is daytime'. But, apart from the fact that a belief cannot be 'based on' direct acquaintance in any sense analogous to that in which it can be said to be based on argument, it is plain from the context that this is not meant. For in the preceding paragraphs to that from which I have quoted, Mr. Keynes has been describing how we pass from direct acquaintance with sensations, ideas, etc., to a

direct knowledge of certain propositions, gained by contemplating the objects of direct acquaintance, and then indirectly by argument to a knowledge of other propositions. Hence it must be meant that sometimes by knowing certain propositions, sometimes by arguing, I come rationally to believe other propositions; and the knowing is distinguished from the arguing as a mode of approach. Now a rational belief that it is daytime may, in a pea-soup London fog, be based on the consensus of the clocks; that is to approach it by arguing; but it cannot be based on direct knowledge that it is daytime. For either to have the direct knowledge is the same as to have the rational belief, or it is different. If it is different, it will I think be admitted to be superior; believing, however rationally, cannot be superior to knowing. And why should any one who directly knows drop to believing? If it is the same, how can one be based on the other? A rational belief based on direct knowledge is then a misnomer. It means something based on itself, or rather something requiring no basis to rest on. We might call this something self-evident; but is it self-evident knowledge, or self-evident rational belief? It can hardly be self-evident rational belief, if, as Mr. Keynes holds, all degrees of rational belief are relative to some premiss or hypothesis; the probability-relation may be self-evident, but not the belief that stands in that probability-relation to a premiss. But if it is self-evident knowledge, it is not a part of our rational belief, and self-evident knowledge, though it may be, and I think is, presupposed by any probable reasoning, cannot fall within that.

Mr. Keynes, however, really does seem to think that I can rationally believe and know the same thing; and that seems to me to imply, if not that he identifies, at least that he fails properly to distinguish them. And we found other passages, which seemed difficult to justify except on the assumption that knowledge was held to be a special case of belief.

I allow that Mr. Keynes seems to draw a distinction elsewhere between 'the highest degree of rational belief, which is termed *certain* rational belief' and knowledge. He says that the first 'corresponds to' the second, and indeed that 'it is preferable to regard knowledge as fundamental and to define *rational belief* by reference to it' (II., § 2). 'Defining' here seems to be intended in the mathematical sense, in which it does not mean analysing what is said to be defined; it is enough, in order to define x , to indicate its precise relation to some known term y . I would not complain that 'knowledge' is taken as a term whose meaning is known, for it is perhaps indefinable. But I do not think the same

can be said for the term 'corresponding to' in the phrase above quoted. We are told that 'knowledge of a proposition always corresponds to certainty of rational belief in it'. As I have already argued, we cannot at once know and believe the same thing. I do not think Mr. Keynes succeeds in distinguishing knowledge and belief except in this way: that a rational belief, even a certain one, is (according to his usage) a belief in one proposition p , which it is rational to entertain in relation to another believed proposition h ; whereas some at least of the propositions which we know are not accepted on the ground of their logical relations to any other propositions, however they may be reached from direct acquaintance 'by some mental process of which it is difficult to give an account'. Of these it might be said that there is knowledge, but not certainty of rational belief; but so far the propositions known would be other than the propositions believed; whereas here 'knowledge of a proposition' is said always to correspond to certainty of rational belief *in it*. This seems to me either false, or to imply that knowledge *is* certainty of rational belief. And if there is probable knowledge, since this *must* be equivalent to probable belief, there can be no real distinction, on Mr. Keynes' doctrine, between belief and knowledge, and the profession of making knowledge fundamental and defining rational belief by reference to it is illusory. Knowledge will be only the limiting degree of rational belief, *i.e.*, it will be *certain* rational belief, a rational belief whose probability = 1.

Plato indeed distinguished between knowledge and true opinion, and it might be said that if a true opinion were entertained with complete conviction, it would still be distinct from knowledge, and would so be the certain belief to which knowledge corresponds. But if I were convinced of an opinion which happened to be true, merely because I had been taught it and had never heard it questioned, I should have perhaps a certain, but not a rational belief. Moreover this certainty would be psychological, and Mr. Keynes says that he is not concerned with psychological certainty. The certainty, as also the lesser degrees of probability, of which he speaks in rational beliefs, are logical; they are grounded on relations between propositions which are the objects of the beliefs. And to this doctrine, that there are objective probability-relations between propositions which are the objects of our beliefs, I wish now to turn, having failed to extract any clear or satisfactory account of knowledge and its objects, or of the distinction and relation between knowledge and belief.

Mr. Keynes does not think that to degrees of probability in belief there correspond degrees of contingency in the real ; his objective probability-relations are not that. For he says that if Mr. Bertrand Russell's view of mathematics is correct (and he seems to see no reason why it should not be so) a small number of primitive or fundamental propositions specify, or determine, the most remote deductions 'not only amongst those known to mathematicians, but amongst those which time and skill have not yet served to solve' (XI., § 8). There are certainties therefore which are not known. These certainties, it is true, he speaks of as relations between propositions, not between numbers. But my point is that the unknown relation may be one of certainty, where we at present can have only a probable belief, or (as he more curiously puts it) 'where the knowledge we actually possess can be, in a logical sense, only probable'. It is not then because there are contingencies in that with which our beliefs are concerned, that these beliefs are only probable. And yet—and this is the point that I wish to press—probability is held to be fundamentally a character not of beliefs, but of that with which they are concerned, *viz.*, of propositions ; it is a relation apprehended between objects of belief, not a character of our believing : logical, not psychological. The probability is in some sense objective, though it is not an objective contingency. There is only one degree of probable belief which it is rational to entertain regarding any proposition *p* in relation to premisses *h* (XII., § 5 (i)), though it is by no means always possible to give to this probability a numerical measure. In fact, relations of probability are as objective as any inferential necessity. 'Inasmuch as it is always assumed that we can sometimes judge directly that a conclusion *follows from* a premiss, it is no great extension of this assumption to suppose that we can sometimes recognise that a conclusion *partially follows from*, or stands in a relation of probability to, a premiss. Moreover, the failure to explain 'probability' in terms of other logical notions, makes a presumption that particular relations of probability must be, in the first instance, distinctly recognised as such, and cannot be evolved by rule out of *data* which themselves contain no statement of probability. On the other hand . . . while we may possess a faculty of direct recognition of many relations of probability, as in the case of many other logical relations, yet some may be more easily recognisable than others. The object of a logical system of probability is to enable us to know the relations, which cannot be easily perceived, by means of other relations

which we can recognise more distinctly—to convert, in fact, vague knowledge into more distinct knowledge' (IV., § 12).

The objectivity of probability-relations, so emphatically asserted in this passage, comes out in another doctrine of Mr. Keynes. These relations vary between two limits, certainty at one end, expressed symbolically by 1, and impossibility at the other, expressed symbolically by 0. Now the recognition that p is impossible in relation to premisses h must have as high a degree of 'psychological' certainty as the recognition that in relation to premisses h' it is 'logically' certain. In other words, I am as certain about p when I judge that there is no probability of it, as when I judge that it is necessary. It is therefore only in regard to relations existing independently of our apprehension, not in regard to the character of or relations between our beliefs, that we can thus distinguish the certain—but should it not be called the necessary?—and the impossible.

Now this is very difficult doctrine. Let us consider it two ways. First, what can be meant by saying that a conclusion partially follows from a premiss? That a conclusion should follow from a premiss means, that if the premiss is true, the conclusion *must* be true also. There is a problem about hypothetical thinking; how, if I do not know that the premiss or conclusion is true, and therefore am not apprehending facts, can I be apprehending a necessary relation of facts? But this problem is no greater where I 'judge directly that a conclusion follows from a premiss,' than where I judge that it '*partially follows from*' it. We may therefore, I think, leave that out, in inquiring what is meant by 'partially following from'. And if to 'follow from' means what I have said, to say that a conclusion partially follows from a premiss will mean, that if the premiss is true, the conclusion *partially must* be so also. And that is merely nonsense. There is no partial necessity. As well might I say that Adam was partially father of Abel, or that if half my opinions about probability were the same as Mr. Keynes's, the statement that they were all the same was partially true. There are some who think that we never apprehend necessary relations, that a universal proposition is only a statement of correlation whose coefficient is unity, and that to say that b follows from a means only that a never occurs without b . But Mr. Keynes can hardly adopt this view, since it would involve the frequency-theory of probability, which he rejects. And even if he did, it would hardly avail him. For if, when b follows from a , a never occurs without b , then, when it partially

follows, *a* partially never occurs without it. If partially to follow means to follow sometimes, to follow cannot mean to follow always.

And secondly, can we suppose that in any subject, in mathematics for example, there can be between the same propositions both unknown logical relations which are certain and known logical relations which are probable? Yet Mr. Keynes is committed to supposing this. In relation to the primitive and fundamental propositions of mathematics other mathematical propositions may have a relation of certainty or impossibility, which time and skill have not yet sufficed to discover, and meanwhile have also a relation of some intermediate degree of probability. The paradox is not lightened by calling the first relations, as Mr. Keynes does, unknown *probabilities*, though it may be disputed, as we have seen, whether what is necessary or impossible should be called probable. For the paradox is that there will be two different relations of the same kind between the same terms at once. It is tempting to suggest that Mr. Keynes's reason for teaching that probability is fundamentally a relation between propositions is the desire to distinguish it from relations between elements in the real, which we apprehend in knowledge, and which are not probable. Thus we should escape the paradox of maintaining that between the same terms (*i.e.*, premiss and conclusion) there hold both relations of the limiting degree of probability which is certainty or impossibility, and probability-relations of intermediate degree. But I have quoted passages enough to show that Mr. Keynes thinks propositions to be objects of knowledge; and I may add that what (following Mr. W. E. Johnson) he calls secondary propositions, such as that *p* has a probability-relation *a* to premisses *h* (where *p* and *h* are primary propositions) are, not less than the primary propositions, called objects of knowledge. Now *a* here may have any value; *i.e.*, the probability-relation which *p* has to *h* may be of any degree; and it may therefore be of the limiting degree at which it is certain that, if *h* is true, *p* is true. Hence propositions are, in Mr. Keynes's view, as much the field of those unknown logical relations which are certain as of the known which are only probable. Nor could it be successfully maintained that what we are thinking about when we say, *e.g.*, that the earth is cooling at a certain rate is not the same as if we were proving that it is doing so.

I conclude that Mr. Keynes's objective probability-relations must be rejected. It may be noted in passing that, if we accept them, we accept an infinite web or aggregate of them. For the probability of a proposition *p* is relative always to

another h ; and there is a different probability of p to every other. Relations of probability, if they exist objectively, exist as it were in every direction among all propositions and combinations of propositions. Mr. Keynes, as we shall see presently, is not prepared to deny that there are such relations between a proposition and a set of mutually contradictory premisses, although the consideration of these relations is not convenient. If that were true, the multitude would be increased, but I willingly omit this addition. Without it, there will still be innumerable probability-relations existing, whether anyone entertains a belief rationally proportioned to them or not. But I venture to suggest, as against such a doctrine, that probability is fundamentally, not derivatively, a character of beliefs; and of propositions only in so far as they *are* believed, or are expressions of beliefs.

Doubtless it will be asked, is there not then a reason why a given belief may be called probable? and must not this reason be found in some relation of the belief to its evidence? I admit it. On certain evidence it is reasonable to believe what on other evidence it would not be reasonable, or not equally reasonable to believe; though I think that often the most reasonable course, if action is not necessary, is to suspend judgment. I admit also that the reasonableness of a belief, or, if you like, the probability of it, is grounded somehow in the facts known. I wish I could explain how, but I cannot. The frequency theory can indeed explain a great deal; I am inclined to think that all numerically definite estimates of probability must be explained by it. To say that the probability of drawing a white ball out of a bag containing 1 white and 9 black balls is $\frac{1}{10}$ means, I think, only that $\frac{1}{10}$ of the drawings possible is drawing a white ball. And if I am to draw many times, it is reasonable to go always on that principle which, if the actual frequencies are proportionate to the alternative possibilities, will bring on the whole the largest proportion of successes to failures; though I cannot transfer what may be said of the whole series of drawings to any one. I think, too, this consideration may be extended from a series of events governed by one set of conditions to a series of events each governed by different conditions. If we define the more probable event, for a series governed by the same conditions, in the way just indicated, we may say that of combinations from different series, the larger number will be combinations of more probable events; therefore more persons who always bank on more probable events will be successful, than who proceed on another principle. But that does not secure

success to everyone so banking. The frequency theory then will cover a great deal; particularly where action is to be justified. And where action is not required, there is, as I have said, always the possibility of suspending judgment; and yet I do not think that is necessarily reasonable. Take for example Newton's Law of Gravitation. I select this because men of science no longer regard it as accurately true. Yet it seems to me that, considering how many observations it was possible to account for on the assumption of its truth, how near to it any other law must have been that would account for them, and how unmotivated until recently the suggestion of any modification of it would have been, it was highly reasonable to believe it, and in that sense the Law was highly probable. Nevertheless it is now held not to be true as Newton formulated it. This indeed illustrates what I entirely believe (as also does Mr. Keynes) that no inductive generalisation is known to be true. But when I say that the law was highly probable, I do not think I can explain the statement as meaning that the vast majority of laws which account as successfully for as wide a range of facts are true; since, as I have just said, I do not think we *know* that any of them are true. It is doubtless reasonable to be guided rather by my knowledge than by my ignorance; yet that does not tell me how much knowledge it is reasonable to form a judgment on at all. There are difficulties then in the subject through which I do not see a way. But I cannot accept Mr. Keynes's way. For the only objective relations are merely of necessity to be, or necessity not to be. Probability after all derives from our ignorance: that is common ground; and therefore it should be a character of our opinions. And there is no probable knowledge. And logical certainty is not any degree of probability.

I pass now to the second part of my subject—Mr. Keynes's view that the theory of probable inference is the general, or fundamental, theory of inference; necessary inference being only a special case. Possibly what leads him to maintain this is his conviction, which I share, of the mere probability of inductive generalisations, and his extension of this (from which I dissent) to all the fundamental assumptions which inductive arguments presuppose. I am not going into the detail of his account of probable inference; it is far too technical and mathematical for me to cope with. But there are some doctrines which I should like to examine, because they seem to me to show that Mr. Keynes is no safe guide in fundamental logical problems.

I will say something first of the doctrine of groups, which,

it seems, we owe to Mr. W. E. Johnson. If I rightly understand Mr. Keynes's reason for adopting this, it is that he is anxious, in stating the 'evidence' relatively to which any proposition is probable, to include all propositions of which a denial would affect its probability. Among these are, no doubt, so-called logical principles, and many more propositions than in most cases we stop to enumerate. Again, some of the 'evidence' for one proposition will equally be 'evidence' for others, in which we do not happen to be equally interested. The probability-relation is therefore between one *set* of propositions and another *set*. But we are not to consider probability-relations between any two sets, but only between such as are possible objects of knowledge, and therefore not self-contradictory. Mr. Keynes does not seem to think it mere absurdity to ask what probability a given conclusion may have on 'a self-contradictory hypothesis'; what the chance is, for example, that a three-legged biped could walk faster than I can. It is only not worth while, as the answer is not to be had. 'We cannot,' he says, 'conveniently apply our theorems to premisses which are self-contradictory' (X., § 2). But this restriction gives us the conception of a *group*. A *group* is a set of propositions such that (i) if a logical principle belongs to it, so do all its instances; (ii) if p and *not- p or q* both belong to it, so does q ; (iii) if p belongs to it, *not- p* is excluded (X., § 2, XI., § 6). I am not quite clear why the first condition is confined to *logical* principles; but I think the reason is this. 'We mean,' he says, 'by a *generalisation*, a statement that all of a definable class of propositions are true.' Thus the generalisation 'All men have their price' means that all propositions of the class to which 'Jones has his price,' 'Stokes has his price,' etc. belong, are true; in Mr. Russell's lingo ' x is a man implies x has his price' for all values of x '. Now when a generalisation is only probable, some members of the class in question may be false. This apparently does not make the generalisation false. 'Jones has his price' is an instance of the generalisation 'All men have their price'; 'Fabricius cannot be bought' is merely not an instance of it. This, I submit, is erroneous. Jones's venality is an instance of human venality; the integrity of Fabricius is not. But if Fabricius cannot be bought, it is false that all men have their price, and there are no instances of that falsehood. However, on Mr. Keynes's doctrine, only of generalisations of the highest probability are all the instances true. The provision, therefore, that if any logical principle belongs to a group, so do all its instances, may be intended to assign to

such principles the highest degree of probability. The other conditions of a group amount to saying that it must not contain propositions that contradict each other. If p and $\text{not-}p$ both belonged, it would; and it would also, if p and $p \text{ implies } q$ belonged, but q did not. For $p \text{ implies } q$ means, in this phraseology, 'either p is false, or q is true'; and that is inconsistent with ' p is true, and q is false'. But though self-consistency is thus required in a group, we are not yet in a position to say that contradictory propositions cannot both be true. They are not to be members of any sets between which we study probability-relations; but we are to prove from the general principles of probable inference the Law of Contradiction. It is doubtless wise to stipulate that no contradictions shall be admitted into the groups of propositions whose logical relations we are to study how to determine; because if we admitted them there, it might be difficult to prove the Law of Contradiction. But the stipulation may raise a doubt of the good sense of undertaking to prove the Law.

Some further points in the doctrine of groups may be mentioned, for the better understanding of what follows. Any not inconsistent premisses will *specify* a group; and we may define the group specified by the premisses h as the group *containing* all the propositions logically following from any of the premisses, and *excluding* all contradictories of those contained. If any part of h specifies a group containing a proposition which the group specified by another part of h excludes, the premisses h are logically inconsistent. We have used in the above statement the expression 'following from'; one proposition follows from, or is logically involved in, another, when there is a transition from one to another by means of a logical principle. A logical principle is what Mr. Russell calls a formal implication. 'The implication $p \text{ implies } q$ is formal, when the disjunction $\text{not-}p \text{ or } q$ is formally true; and a proposition is formally true, when it is a value of a propositional function, in which all the constituents other than the arguments are logical constants, and of which all the values are true' (XI., § 5). This, if I understand, may be illustrated by the implication " p and $p \text{ implies } q$ " implies q '; i.e., either it is not true that both p and $p \text{ implies } q$ are true, or q is true. So far as I see, only self-evident logical principles like the Law of Contradiction, and principles of reasoning like 'Things equal to the same thing are equal to one another,' or like the *Dictum de Omni et Nullo*, would be logical principles. Mr. Keynes thinks that, in an argument conforming to such a principle of reasoning,

the conclusion follows from the premisses *by means of* the principle. If, as I suppose, this is not true, 'following from' has not been defined. Nor, I suppose, can it be defined, but only illustrated; or some other equivalent phrase which happens to be better understood may be substituted.

Further, a set of propositions is said to be *fundamental* to a group, when (i) they belong to the group—this involves their being consistent; (ii) together they completely specify the group; (iii) none of them belongs to a group specified by the rest—*i.e.*, presumably, you can dispense with none, if the group is to be completely specified (XI., § 7). In arguments which we actually use, our group of reference—*i.e.*, the premisses in relation to which we assign to a proposition some degree of probability—is specified by those direct judgments in which we personally *rationally certify* the truth of some propositions and the falsity of others.' It will be noticed that a judgment is said to certify the truth of a proposition—language which illustrates the peculiar status assigned in this theory to propositions. What 'rationally certifying' is, Mr. Keynes, so far as I have observed, does not explain. But perhaps one may gather it from the statement that 'when we have determined what propositions are fundamental, by selecting those which we know directly to be true, or in some other way, then a meaning can be attached to priority, and to the distinction between inference and implication' (XI., § 10). It would seem to be admitted that we must begin with some self-evident knowledge, expressed partly in affirmative, partly in negative propositions; and that these specify a group—*i.e.*, they are included in a group of propositions consisting of them and their logical consequences—with reference to which group we assign to other propositions divers degrees of probability.

Mr. Keynes proceeds to distinguish *real* groups, of which the fundamental set is known to be true, from *hypothetical* groups, of which it is not. He then introduces the term *requiring*: *p* is said to *require q*, 'if it is impossible for us to know a proposition *p* except by inference from a knowledge of *q*'. But *requirement* can be defined without using the word 'inference' as follows: (it is another question whether a knowledge of the *thing* inference is not presupposed)—*p* does not require *q*, if there is a real group *h*, to which *p* belongs and *q* does not belong: it does require it, if there is no such group. There is a further refinement, which I am not sure if I quite follow, explaining when *p* does not require *q* 'within the group *h*' (XI., § 11). I do not, however, think that it concerns my argument, which is this: that

whereas in the next section it is said that 'inference and logical priority can be defined in terms of requirement and real groups,' the notion of inferring has really been taken as known throughout, explicitly when it was used in the first definition offered of requirement, and not the less, though implicitly, in the notion of a real group, by which the second definition was effected.

I will now give the definition of Inference. Mr. Keynes begins with hypothetical inference.

'If p, q ,' which may also be read ' q is hypothetically inferrible from p ,' means that there is a real group h , such that $q/ph = 1$, and $q/h \neq 1$. In order that this may be the case, ph must specify a group: i.e., $p/h \neq 0$, or in other words, p must not be excluded from h . Hypothetical inference is also equivalent to: ' p implies q ,' and " p implies q " does not require q .' In other words, q is hypothetically inferrible from p , if we know that q is true or p is false, and if we can know this without first knowing either that q is true or p is false.'

The following observations may be made on this account of hypothetical inference: (1) as to the symbolism, p/h means the probability of p relatively to premisses h , and so in other cases; (2) the condition that ph must specify a group amounts to saying that nothing can be inferred, even hypothetically, from contradictory premisses; (3) the last sentence in the quotation clearly distinguishes inference from 'implication'. For according to the conventions of Mr. Russell's calculus, ' p implies q ' is equivalent to 'either q is true or p is false,' so that if we take any two propositions whatever, one of which is true and the other false, or one and the other are true or are false, the second implies the first. Thus false propositions imply all propositions, and true propositions are implied by all. 'France is an island' implies 'There will be an earthquake to-morrow,' and this implies 'All right angles are equal'. But I cannot know the first implication without knowing that p , 'France is an island,' is false; nor the second without knowing that q , 'All right angles are equal,' is true. Where the relation between p and q is not that q is implied by, but that it is inferrible from p , it can be known without first knowing either that q is true, or that p is false.

So much for the 'definition' of hypothetical inference 'in terms of requirement and real groups'. Let us pass to that of assertoric inference.

' $p \therefore q$,' which may be read ' p therefore q ' or ' q may be asserted by inference from p ,' means that 'if p, q ' is

true, and in addition p belongs to a real group; *i.e.*, there are proper groups h and h' such that $p/h = 1$, $q/ph' = 1$, $q/h' \neq 1$, $p/h' \neq 0$ (XI, § 12).

In this statement, h' stands for premisses in relation to which p is not impossible, so that p and h' can be true together, and in relation to which also q is not certain, so that p and h' must both be true, if q is to be certain; and since they belong to a real group h , they are true. I cannot find the definition of a 'proper' group; but I think the point is that the fundamental set of h' is part only of the fundamental set of h ; otherwise, whatever that of h specified, that of h' would specify also, and there would be no real distinction between the two groups.

Now it is surely true, that the language in which inference is said to be defined is unintelligible to those who do not already know what it is. The symbolic aids are useless; and to suppose that the use of the symbolism of probability can show that the theory of probability is general and fundamental, and that of necessary inference a special branch of it, is in the literal sense preposterous. What is called hypothetical inference is necessary inference—or inferential necessity—in general or in the abstract; but this relation would never have been understood except through examples where the premisses are true. It is, as I have said above, an important logical problem, which so far as I remember Mr. Keynes does not raise, how we can apprehend a necessity of inference in an argument where premisses and conclusion are false; but I venture to say we never could do it without first apprehending it in one where they are true. The 'definition' of assertoric inference is merely an account of the conditions satisfied in an inference where the premisses are true, in which Mr. Keynes does not distinguish between premisses and principles of reasoning, but treats them alike as premisses.

From these definitions of inference, Mr. Keynes passes to that of priority: ' p is prior to q , when p does not require q , and q requires p , when, that is to say, we can know p without knowing q , but not q unless we first know p ' (XI, § 12); and then he adds (§ 13) 'We can now apply the conception of requirement to intermediate degrees of probability'. But I submit that what he has hitherto applied the conceptions of requirement and of groups to is not any degree of probability at all, but (as was said) inferential necessity.

There follow certain so-called Definitions and Axioms of inference and probability. Many of the Definitions are merely statements of the meaning with which certain

symbols are to be used, *e.g.*, Def. II. 'If P is the relation of certainty, $P = 1$ '. But Def. IX. is, I think, a self-evident proposition. Symbolically it is put thus: ' $ab/h + a\bar{b}/h = a/h$ '. This means 'The sum of the probabilities of "both a and b " and " a but not b " relative to the same hypothesis, is equal to the probability of a relative to this hypothesis'. Now the sum of the probabilities of two events a and b means the probability that either a or b happens; hence the proposition tells us that the probability of a on the hypothesis h is not affected by the condition that, besides a happening, b shall either happen or not happen. But from the Definitions and Axioms Mr. Keynes proceeds to establish certain 'fundamental theorems of necessary inference' by what, I suppose, he would call rigorous methods. If there is any point in this procedure, it must, I conceive, be that without establishing them by such rigorous methods we cannot reasonably have the same full confidence in their truth. And the 19th and 20th of these fundamental theorems are the Laws of Contradiction and Excluded Middle. I propose then in conclusion to consider the deduction of the Law of Contradiction, and in connexion with that, his attempt to establish by probable reasoning the Law of Universal Causation.

The Law of Contradiction is expressed symbolically in the form $a\bar{a}/h = 0$; *i.e.*, the probability, in relation to premisses h , that a is both true and false, is zero. In order to prove this, it has been shown that $a/a = 1$, or $\bar{a}/\bar{a} = 1$: *i.e.*, the probability that if a is true, it is true, or if false, it is false is unity, or amounts to certainty. In order to prove that again, it is first shown that $a/a = 1$, unless a is inconsistent. I do not wish to go into the proof of this, which in effect is a proof that unless contradictory propositions can both be true, they cannot both be true—a theorem which would seem difficult to prove without assuming the Law of Contradiction. But I do wish to call attention to a certain use of symbols at this point. The proof that $a/a = 1$, unless a is inconsistent, uses the proposition that $a/aa = 1$, unless $a/a = 0$. Now if we forget what our symbols stand for, we might suppose this formula to have a meaning; but has it? It tells us that unless it is impossible that on the assumption of the truth of a , a should be true, it is certain that on the assumption of both a 's truth, and the truth of a , a is true. I submit, first, that the supposition that if a is true, it must be false could never be made, and therefore in no real thinking would it appear as a condition needing to be excluded; and secondly, that we cannot combine the hypothesis of the truth of a with the hypothesis of its truth, and therefore in

no real thinking could the theorem be enunciated. Mr. Keynes takes the hypothesis $a/a = 0$ as equivalent to the hypothesis that a is inconsistent, and refers for this to Def. VI., 'If $a/h = 0$, the conjunction ah is *inconsistent*.' That means that, if it is impossible, on the hypothesis h , for a to be true, the truth of a is inconsistent with that of h : a statement which no one would wish to dispute. We may note in passing that without assuming the Law of Contradiction, we could not assert this; for else, why should not a and h at once make an impossible combination, and be consistent? The proposition is not really defining the word 'inconsistency'. That is not a sound of as yet undetermined meaning, to which it proposes to give the meaning 'the combination of two propositions, one of which is impossible, when the other is true'. With that meaning for it, unless it is also assumed that such a combination is impossible, *i.e.*, that what is thus defined never exists, the proof of the Law of Contradiction would break down. But let us leave this point, and ask whether Mr. Keynes is justified in passing from the formula $a/h = 0$ to the formula $a/a = 0$, and holding that, because in the first case the conjunction ah is inconsistent, therefore in the second a is so. That a is impossible on the hypothesis h is a significant statement, when definite meanings are given to our symbols; for the hypothesis and the proposition whose relation to it is in question are different, and it is an intelligible question whether a is impossible or not. But whether a is impossible on the hypothesis a is only the pretence of an intelligible question. Similarly $a/a = 1$, that a is certain on the hypothesis a , is only the pretence of a significant statement; for it pretends a distinction between condition and consequent which it also repudiates. And the symbol $a/aa = 1$ is also meaningless, for the further reason that we cannot regard the truth of a as combined with itself to make a complete condition. However in a train of mathematical reasoning steps may be justified, in which rules of substitution give combinations of symbols at first sight unintelligible or paradoxical, such procedure should be eschewed in logic. For in logic we ought to be able to think the interpretation of our symbols at every stage. By manipulating logical symbols according to certain rules of operation we may appear to have proved something; but unless our formulæ make sense each time when translated into examples, such so-called proof cannot represent our real thought, or furnish a real justification for any logical principle.

So much then for the proof that $a/a = 1$, unless a is in-

consistent. The use of this theorem to prove that $a/a = 1$ or $\bar{a}/\bar{a} = 1$, is, I think, a disguised *petitio* throughout. But let us proceed to the proof of the Law of Contradiction itself. The formulation of the Law is $a\bar{a}/h = 0$. I translate the proof from symbols into words. 'It is certain that if a is false, it is false, and if true, true; therefore it is impossible that if false, it is true, or if true, false' [this step has received a previous symbolic proof]; 'therefore it is impossible that on the hypothesis h , a is both true and false' [for this step we are referred to a theorem which proves that if it is impossible for h_1 to be true on the hypothesis h_2 , it is impossible on the hypothesis h for them to be true together].

Surely all this is valueless. So long as the so-called proof is camouflaged in symbols, and one does not think of their meaning, it is possible to suppose that there is real business; when they are translated, it is seen to be mere word-play. Mr. Keynes has failed to see that the Law of Contradiction, though not a premise of argument, is presupposed in all argument; and the profession of proving it is not a mere *jeu d'esprit*, nor yet a mark of formal completeness, but of serious error in the analysis of thinking.

Now there is another instance, as it appears to me, of the same error, and one perhaps more important, because what this time Mr. Keynes attempts to prove has been seriously contended to be provable by some logicians; whereas, so far as I happen to know, with the exception of Mr. Russell and Mr. Keynes, logicians have maintained that the Law of Contradiction is self-evident, and not provable. There have of course been attempts on the part of associationist or evolutionary psychologists to account for our conviction of it; but these can hardly be regarded as attempts at logical proof.

Mr. Keynes claims that, without in any way presupposing law or causality, we may give to an empirical generalisation, by mere multiplication of instances supporting it, and with no analysis of instances and exclusion of irrelevant circumstances (a procedure which he somewhat strangely calls a consideration of analogy), a probability that tends towards certainty. This however, he says, is possible only on two conditions. The first is, that the value of the probability that, if so many instances have conformed to the generalisation, the next will do so, in spite of the generalisation not being universally true, falls short of certainty by a certain amount, however many instances have conformed without exception found; the second, that there is some finite *a priori* probability of the generalisation, however small, or (as he puts it) that the

a priori probability of the generalisation exceeds impossibility by a finite amount (XX., § 6). If by the second condition it is only meant that apparent instances, however numerous, can never prove a generalisation which is impossible, I suppose we may agree.

The steps by which this claim is justified form an elaborate train of argument in symbolical notation, which I regret that I have not been able to follow. But I hope I have given reason for saying that the manipulation of symbols in a 'formal' proof may proceed according to rule, and yet the argument not be compulsive. In these steps Mr. Keynes professes not to have presupposed the existence of laws; and he writes that 'the common notion, that each successive verification of a doubtful principle strengthens it, is formally proved, therefore, without any appeal to conceptions of law or of causality' (XX., § 4). He conceives himself to be developing, in spite of some real differences, the same fundamental ideas which underlie the theories of Mill and Bacon alike; and I should agree as regards Mill, though not as regards Bacon. He is much impressed by Hume's criticism of our causal reasonings, as indeed others have been; though it is perhaps not sufficiently observed that Hume overthrows the principle of causality by a psychological explanation of the genesis of our beliefs, which assumes the principle so far as concerns the working of the association of ideas. The attempt to meet Hume's criticism by a transcendental solution, which Kant and his school have made, has, Mr. Keynes thinks, prevented them 'from meeting the hostile arguments on their own ground, and from finding a solution along lines which might, conceivably, have satisfied Hume himself' (XXIII., §§ 4, 8). Now I take it that Hume cannot be met on his own ground—i.e., if his assumptions are all granted, and adhered to. If there are no real connexions, the knowledge that one proposition is true can be no rational ground for believing another. Let us assume that we do not know it to be impossible that there are real connexions, or laws. That is not a finite probability in favour of the generalisation that there are laws, which finite probability, must, by one of Mr. Keynes's conditions, exist *a priori*, if his argument, to which I have referred, is to stand. As long as we only do not know it to be impossible, and have no reason to affirm it, all empirical series are equally probable. The very notion of a finite probability, as distinct from mere ignorance of impossibility, is meaningless except on the assumption that there are laws. It is true that the proposition that there are laws will not appear as a premise of

any argument that attempts to establish a particular generalisation, any more than the Law of Contradiction is a premise of any argument establishing a particular conclusion. But deny this, and all arguments are worthless; deny the other and all particular probabilities disappear. If a symbolic argument appears to prove either of these presuppositions, I venture to mistrust the symbolism, not the axiomatic nature of the presuppositions. The same mistake seems to be involved in both cases; that of thinking to prove what is presupposed, because it is not used as a premise.

In the familiar problems about drawing balls from a bag, we may give meaning to the statement that our experience justifies us in assigning some probability to a certain statement about the constitution of the contents, on the assumption that there is a constitution. But if there were none, there could be no probabilities. We deal there with a singular fact. In the inductive sciences we are dealing with universal principles of connexion. But just as there would be no probabilities about the constitution of the contents of this bag, if they had no constitution, so there would be none about the truth of any generalisation, if there were no universal connexions. These are presupposed in the one case, as is a constitution in the other. Mr. Keynes tries to prove too much. The theory of probability will never justify the assumptions on which all particular inductive arguments rest.

III.—SUGGESTIONS FROM AESTHETICS FOR THE METAPHYSIC OF QUALITY (I.).

BY P. LEON.

I SHALL endeavour to examine secondary qualities and the apprehension of them, the relation of art to qualities and to feeling, and in and through doing this, to make some suggestions or put some questions. If these assume the form of dogmatic conclusions, that is merely for convenience.

Assumptions.

The fundamental terms in this enquiry are: *Apprehension*, *Being* (or *entities*), and *Qualities*. Other distinctions, as for example that between mind and matter, subjective and objective, sensations and images will be referred to but not used. They will, as far as possible, be indicated in such a way that we may recognise them without being tempted to raise controversies.

We apprehend in sensing, imagining, judging, inferring, supposing, wishing, dreaming, illusion; perhaps in other ways also, perhaps in some of these ways only. Apprehension is such that it neither creates, nor changes, nor in any way affects the nature of that which is apprehended. This statement, however, need not here be either discussed or proved, since its importance may be regarded as merely methodological or even linguistic. Unless we mean that apprehension does not create or change that which is apprehended, we cannot mean anything by apprehension. I shall speak freely of a mind apprehending, but for the purposes of the argument, it is not necessary to suppose that apprehension is an act of mind. Not "*cogito*," or *I* apprehend, but merely "*est aliquid et apprehenditur*" is relevant.

Qualities.

Qualities form a special class of entities. In that class may be included at any rate the so-called secondary or sense qualities, more precisely this now apprehended scent, sound,

colour, temperature, etc. Because the universal "green" or "sweet" is not itself a quality, any more than the universal of horse is itself an animal, and because we cannot assume that a quality is a "continuant" or an identity persisting through change or difference, I must, to ensure exactness, speak of "this now apprehended quality"; but I do not wish to suggest that it is the apprehension which makes a quality, quality, or individual.

Our list of qualities will be increased later. But for the present confining ourselves to the province indicated, and proceeding by direct inspection, we may characterise these entities, firstly by what they are, and secondly by the way in which they are apprehended.

Qualities are ones, or unities, or individuals, different on the one hand from such an entity as a point. In comparison with a point, any the poorest quality presents a certain amplitude, density or volume. (These terms are intended to be picturesque merely.) On the other hand they differ from such unities as a thing, a person, an organism, a collection, a community, a universal. For unlike these, qualities are internally free from relations.

It is not to be denied that, by analysis, we may arrive at relations, or entities in relation to each other, which are somehow connected with the being of a quality; indeed it will be seen later that this is the case. But no one, I think, will dispute the fact that a quality, *qua* quality, does not present to direct inspection an internal constitution that may at all be called relational. Therefore this point need not be laboured further.

The constitution of a universal of course is not relational in the same sense as that of a thing, person, organism, collection, community. But a universal may be said to be the law of the interconnexion of certain entities, the way in which they are related, or at any rate it may be said to have being only in the being of entities standing in relations to each other. This is enough to distinguish it from a quality; indeed for our purpose it may even be said to be a class of entities, and so in a sense to have an internal constitution which is relational.

The internal constitution of a relation itself (if the expression has any meaning) is not of course relational. Hence to direct inspection, a relation presents great similarity to a quality. It will, however, be distinguished from it in other ways.

Here, be it said parenthetically, we cannot deal separately with all the entities that require to be distinguished from

qualities. But what is said of universals and relations will apply to most if not all of them. And indeed relation is used to cover a multitude of sins.

Things, persons, organisms, etc., have also relations which may be called external, in the sense that they are not relations between part and part within the whole. But though external in this sense, some, if not all, of these relations, constitute, or at any rate are vital to, and inseparable from, the being of a thing, organism, etc. As this point also cannot, I think, be denied, my method of illustrating it is perhaps not very important, and, if wrong, may be discounted. With regard to a thing, it is indeed difficult to say where it begins or ends, and therefore we cannot easily decide which relations are external to it. And even a more independent unity like an organism or a person can hardly be conceived apart from an environment. In their commerce with their environment, *i.e.* in external relations, all these unities exercise their being, display their manifestations, or send off their emanations, and as these emanations are their being, the latter is so far shot through with externality. They have a history, and history always deals with foreign or external relationships, in characterising the being of its object. Moreover their history, like all history, is infinite. Whether because of their relations to the infinity of their environment, or because of some other reason, these unities either are infinites or are infected with infinity. Hence we can never exhaust them. This inexhaustibleness is sometimes said to be the characteristic of individuality; but that depends on what we choose to call an individual. Finally we may add that these unities, even an organism, do not always enter into external relations as wholes, but generally stand in different relations in respect of their different parts.

A universal of course, in so far as it is a universal of any of the above entities, will be infected with the same infinity as they, and even a universal of qualities, *e.g.* the universal "green," is a universal of an infinite number of members, since qualities are unique, this now apprehended quality, etc.

Now a quality also may enter into external relations. Into these relations, unlike the other unities, it enters always as a whole. But none of these relations are constitutive of it or vital to it. Thus a quality may belong to a thing. But whereas, for example, it is part of the being of an eye that it belongs to, *i.e.* functions with, an organism, it is not part of the greenness of a green that it belongs to a leaf; that is not one of the ways in which the green is green. That the green belongs to it, is merely one of the ways in which the

leaf is a leaf or is itself. Nor can it be said that this dependence is inherent in the quality, so that it always points to an environment. That this is not so, will become clearer as our list of qualities grows. Here it is enough to point out that we may apprehend a quality (*e.g.* a sound or a scent) without being able to place it. But the conception of belonging to a thing is difficult, and must be left to the end.

A quality may also be said to stand in the relation of similarity to and difference from other qualities. But the appropriateness of calling similarity and difference relations may be questioned. And certainly they do not constitute the being of anything. A red is red because it is red and not because it is different from a green; because the red is red and the green is green, there is a difference between them. Nor can difference and similarity be said to point to an environment or to an Other. They are present only if there is an Other; but they do not cling to a quality nor do they drag it on to a beyond. And indeed to direct inspection a quality does not suggest either another quality or any other entity. It is clear enough that a sound does not suggest a scent nor a scent a sound, nor does either suggest the necessity of the other. But if we realise that a quality is always unique, always this now apprehended quality, we see that a sound does not point to any other sound even, nor a tint to any other tint.

It is not because of similarity and difference that unities like things have been said to point to and be related to an environment and to be shot through with externality. It is because they exercise their being in acting and suffering, because they are constituted by manifestations or emanations. But a unique quality, this now apprehended quality, cannot be constituted by manifestations. It is a single manifestation itself. It does not act. For what can a quality do? It is not the colour as *quality* or the sound as *quality* that is supposed to undulate, or vibrate, or travel, or affect our sense organs. Rays or waves or air or ether do this, and in so far as they are supposed to do this, they are conceived as entities which are not qualities. And indeed can we conceive a quality as doing anything? We may speak of it as entering our consciousness. But the expression would be meaningless if it were taken literally (*i.e.* if a quality were supposed to enter consciousness in the same way as I enter a room); it never is intended to be taken so. We also say that a sound pierces us; but then we surely mean that we apprehend a peculiar quality, *i.e.* a piercing sound. Similarly, when we

speaking of the fire's heat burning us, we mean that the fire burns us and that we thus come to apprehend a quality, heat.

A quality cannot do anything. Neither can it suffer anything. For there is nothing we can do to it. We cannot even be said to annihilate it. For ordinarily annihilation means merely drastic change. When I cut up a man into little bits I may be said to have annihilated him or to have done something to him, because the bits are in some sense still supposed to be the man, although of this new man we may exclaim "*Quantum mutatus ab illo!*" But a quality cannot change. For it is not so constituted that it can undergo change in one part while remaining the same in another; if it enters into relations, it always enters as a whole. Apart from the impossibility of speaking of this now apprehended quality as changing, let us think of what may be called the blending of two qualities, *e.g.* two notes or tints. Either there is no blending, and then we have no change but merely two qualities, or there is a blending, and then we have a new quality. In this case there is substitution but not change.

It should here be carefully noted that when we talk of blending qualities we cannot mean that we do anything to the *quality*, colour, or sound. We do something to pigments or to chords. So that when we say that quality "*g*" is a blend of *a* and *b*, we can only mean that it resembles both *a* and *b*. In that we can neither add to it nor take away from it, a quality is like a perfect poem or picture. It is in this sense then, namely, in the sense that neither by acting nor by suffering can it have any commerce with an environment, that a quality may be said to be free from, or to be unaffected by, external relations. Consequently, it is also free from infinity. It is "*totus teres atque rotundus*," and is apprehended as such. It we can know exhaustively. And the knowledge of it is not history. For a quality, being what we have shown it to be, cannot have any history. Hence it is that science, which in a certain sense may be said to be the history of action and suffering, does not pretend to deal with qualities as qualities, though it does deal with properties of things, with the ways in which they act. (It is, perhaps, scarcely necessary to add that by a quality we have not meant anything that is regarded as a more or less permanent attribute of a thing, *e.g.* the colour of this table. Such an attribute does seem to have manifestations and a history, and to be infected with the same infinity as the thing itself; how far it is correct to regard it as a quality at all is a

question which will have to be discussed later.) Having no history, a quality may be said to have a timeless being. By this we mean that the mere inspection of quality does not require us to assume or to use the category of Time, or that an entity like quality does not point to the entity Time.

Intensity, which might be regarded as a relation of a quality or at any rate as something in it pointing outwards, I have not considered for the following reasons. (a) I am not sure that an enquiry which does not start with consciousness and stimuli can meet with the obstacle of intensity; (b) if intensity is regarded as belonging to the quality, it does not seem distinguishable from the quality of the quality; (c) if it is regarded as a relation between qualities, as a way of ordering them, what has been said of similarity and difference applies exactly to intensity also. It might be suggested that relation to itself or self-identity is a relation essential to a quality. But self-identity is not a relation either internal or external: perhaps it is only a subtlety. Apprehension also might seem a relation external and yet not inessential to a quality. But we must assume (and the assumption, I think, does no violence to the testimony of direct inspection) that apprehension does not constitute or in any way affect the being of a quality. The end will have to justify the assumption. The end will also show, I think, that apprehension may be said to be both essential and inessential to a quality; also that it is not external or indeed a relation at all: perhaps it, too, will turn out to be of the nature of a subtlety.

Since then it has no commerce with an environment, since ownership by a thing and apprehension are at any rate dubious relations, and since similarity, difference, intensity, and self-identity are not properly relations at all, we may say not merely that a quality is not affected by relations, but that properly it has no relations at all. Considered both internally and externally it is non-relational. It is an independent, complete, self-subsistent, timeless individual. It is its independence that serves to distinguish it from an entity like a relation which otherwise is very much like it. The essence of a relation is just that it relates, that it points to entities other than it. Indeed, if it has a self it would seem to efface itself almost entirely in its subservience.

But if a quality has the characteristics here described, there are two entities from which it cannot be distinguished: one is a *universe*, the other is an *aesthetic whole*. A quality is in fact a universe. And if we examine carefully the Greek aesthetic terms like *κόσμος*, *τάξις*, *ἁρμονία*, *τέλεος*, *ὄλον*,

Aristotle's account of the unity of a tragedy, and later uses of the terms "unity in variety," "multeity in unity," "form," and even "expressiveness" and "characteristic," we shall see that they all point to one fact: the fact that an æsthetic whole is a whole of quality, or more simply a quality, such as we have described it. The significance of the identity of *quality*, *universe*, and *æsthetic whole* will, I hope, come out both in the development and in the conclusion of the argument.

The Apprehension of Qualities.

We may now go on to characterise the apprehension of qualities. We might describe it as immediate or intuitive, were it not for the fact that in a certain sense those epithets are applicable to all knowledge or to the apprehension of any entity (see Lossky: *The Intuitive Basis of Knowledge*). We shall therefore be content with a characterisation, which, though negative, is nevertheless adequate. The apprehension of qualities is *non-judgmental knowledge*. To know a quality is not to judge. The knowledge, apprehension, or realisation of quality, in its fullest and most perfect articulation does not present the two termini of subject and predicate, "that" and a "what." A quality is an ultimate "that." All this follows from its non-relational internal constitution, and above all from the indifference of its being to all external relations or quasi-relations such as belonging to a thing, similarity, and difference. Let us carefully separate in thought that aspect of knowledge which is knowledge of quality *qua* quality, and we see that to realise or to know fully the nature of this unique quality, *e.g.*, this green, is not to make any of the following judgments: "this is a green or a colour," *i.e.* "it is like other qualities"; "this is not a red," *i.e.* "it is different from it"; "this belongs to a leaf"; "this acts in such and such a way." For to be similar, or different, or to belong to a thing, does not constitute the being of a quality; and a quality does not act or suffer in any way. And if the making of these judgments does not constitute the knowledge of the being of a quality, what judgment can? Moreover, to have judgment at all, the subject or the 'that' must already be known partially at least, and since a quality, unlike a thing, enters into relations only as a whole, and therefore, is apprehended or known either wholly or not at all, it follows that to be made the subject of a judgment, it must already be known fully. Hence the above suggested judgments presuppose the knowledge of the quality and so cannot contribute to that knowledge, and there is no other

judgment which can be conceived to constitute knowledge of it. Conversely, we can see that no number of judgments which can be said to be "about" it or to point to it, or to have it as subject in the form of an unknown x , can yield us knowledge of the quality, as quality—of its being. Thus we have many judgments with ultra-violet rays as subject, and we suppose that to these rays there is a corresponding or equivalent quality. Nevertheless, we do not know or apprehend that quality.

This reasoning may be supported by an example drawn from the æsthetic province. To apprehend a nocturne of Chopin's is not the same as to judge that it resembles a piece of Tchaikowski's, or even that it is music or that it is beautiful. To make it a subject of judgment at all, it must first be apprehended as itself; and in this case it is clear that the attempt to make any judgment prematurely, will actually interfere with the apprehension of quality. Conversely, though I may be told when a piece x was composed, how it resembles and how it differs from other pieces of Chopin, those judgments will not enable me to apprehend x as quality.

It should be added that where we have a judgment with a quality for subject, that judgment is knowledge not of the being of the quality but of something else; thus in the judgment "this quality is a green," I have knowledge not of the being of this quality but of the being of the universal green. Similarly when I am told that a certain piece of music expresses the Slavonic spirit, that does not help me to know the music (this I do by hearing it); it tells me something about the Slavonic spirit. In all such judgments the predicate is the real subject.

I am, of course, speaking all the time of explicit or developed knowledge, so that there can be no question of implicit judgment, implicit universals, etc. With the help of the word "implicit," or by an appeal to the category of confusion, everything can be made out to be everything else.

The complete apprehension of the being of other entities, on the other hand, must be judgment. I only apprehend the being of a thing (and this applies also to organism, person, etc.) in judging that it has certain attributes and acts in certain ways. Unlike a quality, it enters into relations by its parts, and so we *can* have judgments the subjects of which are parts of the thing. Since it is infected with infinity, its being can only be known in an infinite series of judgments.

That universals are known in and through judgments

only, is proved by the fact that the knowledge of universals is given in the sciences and philosophy, and these are made up of judgments.

A relation, it might seem, is known in apprehension which is not judgment. But since the nature of a relation is to relate two terms, that nature is swallowed up in an attribute or attributes of the two terms, so that I can only know its being in knowing that *a* is related to *b* and *b* is related to *a*, *i.e.* in judgments.

The apprehension of quality then is knowledge which is not judgment. It does not involve the distinction between the *that* and the *what*. Neither does it involve the distinction between subject and object. For, just as to know this green as itself is not to judge that it is not red, so neither is it to judge that it is not myself. (This, however, does not mean that I judge or imagine that it *is* myself.) That distinction, like others, is, however, involved in knowledge which is judgment.

Another distinction not present in the mere apprehension of quality is that between appearance and reality. If I apprehend a green and you a red, we are not in that respect in conflict, and so far the occasion for those terms of abuse "appearance" and "reality" cannot arise. The occasion only arises when in judging we attribute the different qualities to the same place at the same time in the same respect. Then it is about the being of the thing and not of the quality that we differ. About the being of a quality there can never be difference, though that would seem to be the case in judgments containing quality as one of the terms. But such judgments, as we have seen, are knowledge not of quality but of some other entity. Thus, if I say, "this is a red," you can only contradict me, because you assume that we are apprehending the same quality and that I am classifying it wrongly, that I do not know what the universal red is. You do not mean that what I apprehend is nothing, or is not such as I apprehend it.

This mere apprehension of pure quality, free from the distinction of subject and predicate, subject and object, appearance and reality, need not be conceived as a separate activity. It is a distinguishable aspect in all developed knowledge. Thus, if I decide that the blue in the distance is a mountain, and afterwards say it is a cloud, my knowledge changes in one aspect, *i.e. qua* judgment, but remains constant in its other aspect, that of apprehension of quality.

This apprehension may also be called realisation or appreciation, and we can be said to enter into, to penetrate or absorb

ourselves in a quality. The apprehension may have degrees of fulness, vividness, strength, or distinctness, and according as the quality is indistinctly or distinctly apprehended, it may be said to be poor and meagre or rich, engrossing, engulfing, satisfying. Just as developed judgment is science and philosophy, so, we shall see reason to believe, developed apprehension of quality is the æsthetic imagination.

It will be evident enough from this, that we are not dealing with sensation. In an enquiry which starts merely with apprehension and entities, we obviously cannot use psychological distinctions, such as that between ideation and sensation. We see that certain qualities are classified as *sensa* or sensations and others as images, which are representations or copies of these. But, for us, they are all qualities, and while we do not deny the validity of the classifications, we cannot use them. When I talk of apprehending a quality, I do not mean sensing it. I apprehend a quality now, when by an effort of concentration analogous to reflection, I apprehend the quality "virginal whiteness" or "green felicity". This is not what is called having a sensation. If we are to go beyond the bare word *apprehension*, we should say that in all cases it is the whole mind which apprehends quality, and whether it does this through the senses or not does not matter for our purpose. But as yet we do not need a mind even for our argument, though we may talk about it for purposes of illustration.

We may now go on to extend our list of qualities. In doing this, it will be understood that we are appealing partly to the consensus of language, but above all we are asking whether there is apprehension and an apprehended entity, and whether in each case the apprehension and the entity are such as we have described. We also believe that in no case does the apprehension create the entity apprehended.

Analysis of Quality into Elements.

With qualities like "cold whiteness" (*e.g.* of snow), "glittering sharpness" (*e.g.* of a knife), "bitter cold," "sweet sound," while still keeping within the domain marked out by the secondary qualities, we come to a fuller apprehension and to richer qualities. Both the apprehension and the quality would seem to be composite or complex; at any rate an analysis can be given of each. Thus the first quality would be analysed into the coldness and the whiteness and the second into the glitter and the sharpness. But generally the analysis is of the apprehension, and it would be said, supposing

the apprehension were in an act of sensing, that in the first case we had a visual sensation of white and an image or idea of cold, in the second a visual sensation and a tactile image and so on.

Analysis can, however, be made even before we come to this stage. So, white light can be analysed into all the colours. And Bergson tells us that the consciousness of a flash of light is the condensation into one simultaneously apprehended whole of billions of successive vibrations. A sensation of red light experienced by us in the course of a second corresponds in itself to a succession of vibrations which, if separately distinguished by us with the greatest possible economy of time, would occupy more than two hundred and fifty centuries of our history.

But here it is obvious that no such thing is done, that we do not in fact apprehend any vibration. Nor in the apprehension of white do we apprehend all the different colours; we apprehend one colour. In exactly the same way, however, the apprehension of "cold whiteness," is one act and the quality apprehended is one. There is no plurality or togetherness, as there might be for example in the simultaneous apprehension of a colour and a sound. The analysis may, however, represent the history of the apprehension, and the elements into which the quality is analysed may be said to constitute it, but only in such a way that they lose themselves in the synthesis or unity, and a new quality is produced: *e.g.* the peculiar quality "cold whiteness". What of new there is here, cannot be reached by the separate apprehension of the elements; the whole must be apprehended directly. Hence the analysis cannot explain away the being of the new quality; for it cannot exhaust it. It is important to insist on this; for, if psychological analysis be considered adequate, there is no metaphysical problem either in the qualities already given or in those which will follow.

Some of the above syntheses (from a standpoint other than that of the present enquiry) might be classed as physical, as perhaps that of white, or of the vibrations; others as psychological or associational, as in the case of bitter cold, sweet sound, glittering sharpness. But, whatever the class in which the whole is placed, we must insist that just as apprehension does not create the elements, so it does not create the whole either.

To do justice to both the synthesis and analysis, we shall say that the apprehension is the unity of its history or resumes its history within itself; the quality may be called the unity or the acme or the flower of its elements, and that

whether these be qualities themselves or other entities, such as vibrations, things, universals, or relations. This, however, is not to be understood as prejudicial to its status of a non-relational individual. These elements it does not present in itself, and we are not aware of them in so far as we are aware of the quality. But this question must be left to the end.

We may now launch on an infinite ocean of qualities: freshness, serenity, calm, sombreness, majesty, splendour, stateliness, weirdness, glamour, mysteriousness, elusiveness, pitifulness, awfulness, delicacy, exquisiteness, pathos, tragedy, grotesqueness, oppressiveness, gloominess, terribleness, austerity, romantic charm, picturesqueness, Dantesqueness, etc., etc.

Now in this case too, just as in that of "cold whiteness," psychology can analyse both the apprehension and the qualities. In analysing the apprehension of "the genial light, warmth, and freshness, which we seek as exhilarating, or the sultry glare and stifling heat, which we avoid as depressing" (Ward, *Psych. Principles*, p. 110), it will refer to organic sensations; in other cases to kinaesthetic sensations; it will use largely the principle of association, and above all the term feeling. But anything like an adequate analysis (a complete one is impossible) of the apprehension of some of these qualities will carry us far beyond the limits of any descriptive psychology; such an analysis would make a history not merely of one mind but of many minds interacting with each other in such ways as minds do interact; it would be a history of a phase of culture or of the whole of culture. Thus in analysing my present apprehension of a quality which I call "romantic charm," I should have to refer to many acts of apprehension in the past. If these acts are performed by my mind, they are intimately connected with everything else that my mind can be said to do or to be; hence I should have to give a history of my mind. Similarly I should have to give a history of many if not of all other minds. This is of course impossible. But what is possible is to give a partial history, written as it were in shorthand; such would be the history of the "Romantic Movement." This much at least would be involved in an adequate analysis of my apprehension of romantic charm. Here, too, as in the simpler cases with which we started, we shall say that the apprehension is the unity of its history, or resumes its history within itself, though in this case it is the history not only of one mind but of a cultural movement or of the whole of civilisation; the quality is the unity or the acme of all the entities apprehended or of all that ever was in the course of

such a history. Nevertheless the apprehension is one and the quality one. That this is not mere mythology, in the case of the apprehension at any rate, may be seen by considering what is involved in the appropriate response, let us say, to a Greek phrase like *κυμάτων ἀνήριθμον γέλασμα*. The appropriate response is a single apprehension of a quality "the innumerably-twinkling smile of the waves." In performing this single apprehension I am not also performing acts of apprehension which constitute the learning of Greek declensions or conjugations, or the translation of the words with the help of the dictionary. But I know that I had to perform these acts in the past, and without them my present response would obviously be impossible. It is necessary that they should have been, and they have contributed to the being of the response; nevertheless as acts of apprehension they are not present now. To do justice to both these facts I say that these acts are resumed in the present act as its history. (If I had a real taste for mythology I should say they were present in the Unconscious or Sub-Conscious.) Now, that history cannot be divorced from the rest of my personal history; also it is obviously continuous at least with the teaching of Greek, the making of the Greek dictionary and the revival of Greek learning in Europe, and that is continuous with the whole of civilisation, or of European civilisation at any rate. In that sense my response may be said to resume not merely my history, but all history. That is what is meant by "tradition" and by being subject to "influences." To say more would be to anticipate too much.

Apprehension of Quality through Art.

We must now endeavour to give more adequate instances of quality. Each quality, as we have said, is individual, and therefore general words, even such as "green," "red," are not adequate for any of them, and may be even misleading. But still more general, vague, and inadequate are the words majesty, weirdness, splendour, and the rest which I have just given. To apprehend a unique quality, we must go to a work of art. By this I mean no more, in the first instance, than that, if not content with vague and general directions, I wish to confront you with a quality, I must invent some compelling or evocative phrase like "green felicity" or "a green thought in a green shade;" and this, *le mot juste*, would be called literary art in miniature.

What we apprehend with the help of art may be comparatively simple qualities. Such are those of which we

become aware through the phrases cited or through words like:—

“Nec tamen interea raucae, tua cura, palumbes
Nec gemere aëria cessabit turtur ab ulmo” (Virgil),

or “the foamless long-heaving violet sea,” or in Homer’s

λειμώνες ἄλως πολιοῖο παρ’ ὄχθας ὑδρηλοί, μαλακοί,

(“meadows by the grey sea’s shore, well-watered and soft”) or in Wordsworth’s

“voice . . . heard

In spring-time from the cuckoo-bird
Breaking the silence of the seas
Among the farthest Hebrides,”

or Shakespeare’s:—

“daffodils that come before the swallow dares and take
The winds of March with beauty.”

The qualities here apprehended are comparatively simple; they may, inadequately it is true, be said to be a colour (green), a sound in the case of Virgil, a certain lusciousness and freshness in Homer’s words, a swooning and silvery etheriality in Wordsworth’s. But simple as they are, they are at least as rich and complex as the “cold whiteness” we have considered. They are larger and ampler than any quality that can be said to be given in mere sensation or than anything we can apprehend by our unaided selves, unless indeed we are great artists ourselves; in that case, too, our apprehension would not be complete until it had been fixed by the help of words and rhythm or some other artistic medium, just as our own theories are not really clear to ourselves even, before they have been worked out in sentences and paragraphs. These qualities have a certain enveloping atmosphere; we breathe in them a freer ether; we disport ourselves in them.

If we are concerned with the distinction of the senses, we shall point out that the arts appeal to us primarily through one of our senses, through hearing or sight. Then the synthesis involved even in these comparatively simple qualities will be described by saying that one of the senses does the work of all the rest, and all in one act. Thus the green apprehended is a colour which we hear; the freshness, lusciousness, and softness is also heard, and the etheriality in Wordsworth’s words is something that we breathe through our hearing. So in music we can be said to hear wetness, hear colour, a perfume, a taste.¹ In a picture, we see warmth

¹ “While she sang, I felt as though I were eating a ripe, sweet melon.” Chekov, “My life.”

we see loudness, sweetness and freshness, sharpness, etc. Hence it is that critics tend to speak of music in terms of colour and of paintings in terms of sound. Such a description has its uses; and the excellence of certain works of art may be said to consist in their enabling us to apprehend a synthesis of which such a description can be given; their failure consists in seeking without attaining such a synthesis. It must, however, be understood that there is one apprehension by the whole mind and not a number of acts, still less of acts of sensation; the quality, too, is one.

Such qualities as we have just been considering would be called sensuous or purely sensuous, and to be simple and sensuous in this way is the function of the highest art. For us, however, the distinction between sensuous and non-sensuous cannot have much importance. For if all quality is apprehended fully through art only, then all quality must be in the first instance at least sound and colour, or at any rate what is seen, and in this sense all quality must be sensuous. The distinction cannot even mark off precisely the apprehension of quality from other apprehension. For ultimately the apprehension of the most metaphysical of universals even, must also be rooted in the senses.

Coming now to larger works of art, we can say that through the Agamemnon of Æschylus we apprehend a certain gorgeous gloom and splendour, a serene and tranquil horror or luminous and crystalline tempestuousness through the Oedipus Tyrannus of Sophocles, through the Odyssey and Iliad a bright speed and unexhausted vitality, a white simplicity through a poem of Collins, and through Virgil's poetry a brooding pathos or the tearfulness of things. Here once more we are using general and therefore inadequate terms. For the unique quality we must point to the work of art. The quality needs for its apprehension all the words and the rhythm constituting the poem. Of course we do not overlook the fact that in extended works, it is only the rare architectonic masters, and they also rarely, who attain complete æsthetic unity or what I call unity of quality. What is published as a single poem, drama, or symphony may be merely a collection of phrases, scenes, or melodies and may contain patches which are not art at all. In that case we have many qualities, many æsthetic wholes, given in the separate phrases, scenes, or melodies. These are, then, the individual works of art.

Now we have seen that an apprehension of a rich quality, though in itself single, resumes in itself all history, and that therefore a complete analysis of it is impossible. Corre-

spondingly any quality of which we become aware through a work of art, though in itself single, is the unity or the acme of elements, the number of which can never be completely given. In anticipation we shall say that such a quality, and perhaps every quality, is impregnated with the universe. It is given to the musician "that out of three sounds he frame, not a fourth sound, but a star." The painter's imagination "busies itself throughout in expressing occult and far-sought sympathies in every detail. . . . There is not a stone, leaf, or shadow, nor anything so small but Tintoret gives it meaning and oracular voice" (Ruskin: *Mod. Painters*). "It is part of the ideality of the highest sort of dramatic poetry," Pater says (*School of Giorgione*), "that it presents us with a kind of profoundly significant and animated instants, a mere gesture, a look, a smile perhaps—some brief and wholly concrete moment—into which, however, all the motives, all the interests and effects of a long history, have condensed themselves, and which seem to absorb past and future in an intense consciousness of the present."

Accordingly, of a certain unique quality, we shall, if we are wise, simply say that it is what it is, pointing to the work of art through which we have become aware of it, *e.g.* to Leonardo da Vinci's *Monna Lisa*. If we are bold, we shall proceed to analyse it and say in the first instance, and quite abstractly, that it is colour. Venturing beyond this, we enter on a journey which has no end. We may say with Pater that the *Monna Lisa* "is expressive of what in the ways of a thousand years men had come to desire. Hers is the head upon which all "the ends of the world are come." . . . It is a beauty wrought of strange thoughts and fantastic reveries and exquisite passions. Into it the soul with all its maladies has passed. All the thoughts and experiences of the world have etched and moulded there . . . the animalism of Greece, the lust of Rome, the mysticism of the Middle Age, with its spiritual ambition and imaginative loves, the return of the Pagan world, the sins of the Borgias. . . . As Leda she was the mother of Helen of Troy and as St. Anne, the mother of Mary." All this, and an infinite more, may be true of the *Monna Lisa*. But to realise the quality here dealt with as what it is, we need only have artistic sensibility and look at the painting, we need not be aware of or know anything about the animalism of Greece, the lust of Rome, the Middle Age, the Borgias, Leda, and St. Anne. Nor in contemplating the picture do we think of these, in any legitimate sense of the word thinking. It would not be surprising if Leonardo da Vinci himself, amazed at this

analysis, should disown it and say that he had not thought of any of these things in making his portrait. It is well known that many an artist is amazed or amused to find from his critics what wonderful thoughts he had in his mind without knowing of them. Turner¹ was reported to have declared he was unaware of putting into his pictures what Ruskin professed to find in them. And Ruskin said that that might be true but was irrelevant. He speaks of Turner's "mighty unconsciousness." Both Turner and Ruskin were right. This phenomenon would be generally alluded to as "inspiration" or by some psychologists as the unconscious. As far as the apprehension goes, we have already touched upon it and said that in a single act of apprehension may be resumed all history, and that yet in this act I am obviously not aware of this history, of which in detail no one can be aware. Yet in this resumption of history there is no mystery. At any rate we can understand it by reflecting how ideas are handed on from individual to individual, and so on from generation to generation, so that in the end you may have a man continuing Plato's philosophy or realising Plato's ideals, without, however, having read a word of Plato or knowing that he ever existed. But in this case it is the synthesis of the elements going to make up the quality, which seems curious. It would appear that the account of this synthesis is identical with the history of the apprehension of it or at any rate of some apprehension. This, too, we must hope, will be righted in the end. For the moment we must be content with pointing out that an analysis of an apprehended æsthetic whole, such as the analysis given by Pater, bears the same relation to that whole, as does the analysis of a colour to the apprehended colour. In being aware of white, we are not aware of all the colours of the spectrum nor are we aware of billions of vibrations. Similarly, in contemplating the *Monna Lisa* we are not aware of the Borgias, of Leda, of the Middle Age, and the other things of which Pater speaks.

¹ See Ruskin: Library Edition: *Mod. Painters*, iv. p. 274.

(To be continued.)

IV.—'REPRESENTATIVE IDEAS' IN MALEBRANCHE AND ARNAULD.

BY A. O. LOVEJOY.

THE celebrated controversy between Malebranche and Arnauld concerning representative ideas seems to be commonly regarded by the "new" realists of the present time as the opening skirmish in a battle between dualistic and monistic realism which has been twice resumed—once in Scotland at the end of the eighteenth century, a second time, with larger forces and improved weapons, during the past two decades. Arnauld is consequently in process of canonisation at the hands of contemporary adherents of a monistic theory of perception, who see in him one of the ablest as well as the earliest of modern champions of their cause. It was apparently Prof. Dawes Hicks who in some sense rediscovered him about eighteen years ago.¹ The place which he now holds in the admiration of neo-realists is illustrated by Prof. Laird's language about him in *A Study of Realism*. "The rigour, strength and sureness of Arnauld's logic," says Mr. Laird, "made him an easy victor," in his controversy with Malebranche. "His relentless pursuit of Malebranche's doctrine of representative knowledge is still the classic exposure of that theory and would have killed it if philosophers had learned to avoid the mistakes of their ancestors." "What is more," adds Mr. Laird, "Arnauld laid the foundations of a comprehensive theory of knowledge, . . . interesting on account of the formal precision of its statement."² Mr. Morris Ginsberg writes in the same vein in the introduction to his welcome translation of Malebranche's *Entretiens Métaphysiques*: "Arnauld detects most of the vulnerable points of the doctrine of representative perception and furnishes the foundation for a thorough-going realistic theory of knowledge". He rejects Malebranche's "assumption that direct knowledge of real things is impossible, and that, therefore, a

¹ *Proc. Aristot. Soc.*, 1905-6, p. 275.

² *Op. cit.*, 1920, p. 3.

tertium quid, a representative idea, is needed to mediate between the mind and the object known".¹

But if we turn to those passages in the book *Des vraies et des fausses idées* which purport to set forth Arnauld's own theory of perception, in its contrast with Malebranche's, we come upon utterances far from appropriate to a supposed precursor in epistemology of (say) Prof. Samuel Alexander. The conception of Arnauld's doctrine and of its relation to contemporary realistic movements which has been given currency by the writers quoted is, as I shall try to show, essentially erroneous. Two or three detached expressions of his lend some colour to it; but it is irreconcilable with his language taken as a whole and construed in its seventeenth-century meaning and in its historic setting. In some important respects, indeed, it is Malebranche who is the nearer of the two to the position of the philosophers of our day who proclaim the victory of his adversary.

Malebranche's "theory of ideas" which Arnauld attacked was not, it must be borne in mind, a "theory of representative perception" in the ordinary sense of that term. The word "idea" had for Malebranche solely its Platonic and realistic, not its psychological and subjectivistic, sense. "Ideas" are identical with "les essences intelligibles, éternelles et nécessaires"; and these are in no sense states of our minds ("modifications de l'âme"). The modern term "neutral entities" describes them precisely; for they are objective realities which can be assigned to neither side of the Cartesian psycho-physical dualism. They manifest their independent reality in the same way as material objects. "You believe that the floor of the room exists because it resists you. . . . But do you think that your ideas do not also resist you?"² It is these logical entities only which are immediately given (not 'represented') in perception. But with this Platonic realism Malebranche combines, as do several contemporaries, a physical realism. And upon both Platonistic and Cartesian grounds, our apprehension of physical realities cannot be direct. Bits of matter cannot enter consciousness bodily. Hence, to maintain his physical realism, Malebranche is compelled to say that corporeal

¹ Malebranche's *Dialogues on Metaphysics and Religion*, Translator's Introd. ; 1923, p. 39.

² The argument in full is given in the *Premier Entretien*, 1871 ed., pp. 14-16. The same argument for the view that "the realities which compose our mental content are of the nature of logical concepts," which are "not composed of mental stuff" may be found in Mr. E. B. Holt's *The Concept of Consciousness*, p. 51.

things must be "represented" in perception by their essences—as his final doctrine puts it, by "intelligible extension" and its modes, which constitute the pure "idea" of matter. This, however, is not the whole of our perceptual content. All of it that is strictly veridical consists of the ideas: but there remain the ordinary sense-qualities (colour, sound, etc.) which, upon Cartesian principles, are not attributable to the real corporeal world. These, then, and these alone, Malebranche regards as subjective. They are mere "modifications de l'âme," having neither independent existence of their own, nor any external duplicates. In his own words, since our sensations "are not distinct from ourselves, *they are not capable of representing anything distinct from us*".¹ Nevertheless they can be known to be caused by real physical objects and their changes. Without them we should never have reason to suspect that the essence of matter has a corporeal replica or shadow. "The sensation of colour with which God impresses me upon the presence of a sphere . . . is a sort of *natural* revelation by which He informs me that there is before me such and such a body." The information is mediated through our power of reasoning from effect to cause. We know that there is no effect without a cause; we can discover in the pure geometrical idea of the sphere no causal explanation of the colour which accompanies our perception of it; we therefore are led to assume a physical sphere which, though itself without colour, can be conceived to set up motions of corpuscles, which in turn can generate motions in the brain. "It is this agitation of the brain," then, "which is the occasional or natural cause of our sensations";² and thus sensations give us evidence of the existence of material things, though they cannot represent to us their natures.

It will be observed, then, that there are no "representative mental entities" in Malebranche's account of perception. The factors in perception which for him are "representative" are never "mental" and those which are "mental" are never "representative". He does not hold that the truth of a perception consists in the existence of a relation of qualitative

¹ Dixième Éclaircissement, in *Recherche de la Vérité*, ed. Bouillier, 1879, II., 385 (italics mine). Cf. also Malebranche's *Réponse à M. Régis* (*ibid.*, p. 260): "I distinguish my ideas from the perception which I have of them, from the modification which they produce in me. . . . I believe that the modalities of my mind, or my perceptions, represent to me only themselves."

² *Réponse à Arnauld*, in Arnauld's *Œuvres philos.*, ed. Simon, 1843, p. 357.

similarity between a particular psychical existent, in the form of a complex of sense-data, and a physical object. He rejects not merely as unproved but as intrinsically impossible the supposition that anything properly describable as a mental state, or "modification de l'âme," can be "representative" of anything that is *not* a "modification de l'âme"—or, indeed, of anything at all.

Now it is against this specific theory, and not against the notion of representative perception in general, that Arnauld tells us that his attack is directed:

"The 'representative entities' which I am combating on the ground that they are superfluous are *only those which are supposed to be really distinct from our ideas taken as perceptions*; for I am not attempting to oppose every sort of representative entities or representative modalities, since *it is clear to anyone who reflects upon what takes place in his own mind that all our perceptions are modalities which are essentially representative*".¹

The italicised concluding clause of this sentence Malebranche accepts as an accurate statement of the essential point at issue in the controversy:

"It is true that I have denied, perhaps five hundred times, the proposition that 'it is clear to anyone who reflects upon his own mind that our perceptions are essentially representative'. I have always declared that if this proposition were true M. Arnauld would be right and I should be wrong. . . . The entire dispute between us with respect to ideas depends upon this matter".²

Thus it was agreed by both disputants that the issue under discussion was not whether "êtres représentatifs" of *some* kind are involved in our apprehension of physical objects, but whether the "êtres représentatifs" which both believed to be indispensable were, as Malebranche held, "êtres représentatifs *distingués des perceptions*" (i.e., were objective

¹ *Des vraies et des fausses idées* (hereafter cited as *V.F.I.*), p. 52; italics mine.

² "Réponse à la troisième lettre de M. Arnauld," written 1694; in *Recueil de toutes les réponses du Père Malebranche*, 1709, IV., p. 3. Cf. also the following, as showing that Malebranche understood Arnauld's doctrine in the sense here set forth: Up to a certain point in the argument, says Malebranche, "I have merely asserted that something different from the sun was necessary to represent it to the mind. Whether this is a modality of the mind, according to the opinion of M. Arnauld, or . . . intelligible extension rendered sensible by light or colour, according to my opinion, is a question which I have not thus far considered" (*V.F.I.*, p. 353).

logical entities, or essences), or were, as Arnauld maintained, identical with our perceptions as subjective states. The crucial question was whether, as Arnauld affirmed and Malebranche denied, subjective states *can be* "representative" of physical reals.

But what precisely, it may be asked, does Arnauld mean by a perception, and what does he mean by saying that perceptions are representative entities? In his terminology, he tells us, the expressions "idea of an object" and "perception of an object" stand for the same thing; and "it is certain that these ideas are attributes or modifications of the mind". The word "idea," that is to say, reverts in Arnauld from its Platonistic to its psychological sense, already employed by Descartes, Régis and other Cartesians. But to precisely what psychological sense? Is the "modification of the mind," denoted by this word, and by its synonym "perception," a mental act or function, or a mental content? perceiving or percept? There is a passage of Arnauld's in which Mr. Dawes Hicks finds a recognition of the distinction between these two notions, a distinction fundamental in the doctrine to which he himself adheres:

"It must be remarked [says Arnauld] that this one thing [which can be called either 'perception' or 'idea'] has two relations, one to the mind which it modifies, the other to the thing perceived, in so far as it is *objectivement* in the mind; and that the word 'perception' refers more directly to the former relation, the word 'idea' to the latter. . . . This remark is very important for the resolution of many difficulties, which are due solely to the fact that people do not sufficiently understand that there are [in perception] not two different entities, but a single modification of our mind which contains essentially these two relations; since I cannot have a perception which is not at one and the same time a *perception of my mind as perceiving*, and a *perception of something as perceived*, and since nothing can be *objectivement* in my mind (which is what I mean by an 'idea') without my mind's perceiving it".¹

This passage is one of the principal sources of the interpretation of Arnauld which I am contesting. Undeniably it does, if taken by itself, seem to suggest, in one phrase, a distinction between psychic process and psychic content. Yet

¹ *V.F.I.*, p. 51. In order to avoid what might, at this point, seem a question-begging rendering of *objectivement*, I have left it for the present untranslated. Its meaning will be discussed below.

it certainly cannot be said to do so unequivocally; while elsewhere Arnauld quite unequivocally defines "idea" or "perception" in terms of content.

"When I say that the 'idea' is the same thing as the 'perception,' I signify by the perception anything of which my mind is aware (*conçoit*), whether by the first apprehension it has of things, by the judgments which it forms about them, or by what it discovers concerning them by reasoning. . . . Though it is perhaps only through reasoning that I am completely assured that there veritably exist outside of my mind an earth, sun and stars, the idea which represents to me the earth, the sun or the stars as really existing outside of my mind does not less deserve the name of idea".¹

Again, the passage previously cited does not really say that physical objects are apprehended directly, without the mediation of any psychical substitute; and it cannot be supposed to mean this, in view of the fact that Arnauld elsewhere repeatedly says the contrary. He is indefatigable in his insistence upon two propositions, already indicated, which forbid such an interpretation: (a) that a perception is a "modification de l'âme," i.e., has, not a physical, but a psychical mode of existence—which implies that it cannot be existentially identical with any physical object; (b) that this mental entity or modality is at the same time an "être représentatif," and that perceptual knowledge is made possible by its representative function. This is hardly a way of saying that objects are given *in propria persona* and have no need of representatives.

What, then, does Arnauld mean when he says that a perception is not two entities, but "a single modification of the mind which essentially has two relations"? If the central issue, as defined both by him and by Malebranche, be borne in mind, the meaning is evident. Both were agreed that sense-qualities and perceptions are "modifications of the mind"; but Malebranche, as we have seen, had maintained that, precisely for this reason, they cannot be representative of anything outside the mind. He was unable to conceive how a state of one substance can be a "representation" of a state of another substance, in such a way that by the former we may know the latter. Since Arnauld contended that a modification of the mind is truly a representation of something not itself and not mental in nature, he was compelled to deal with Male-

¹ *V.F.I.*, pp. 52-53.

branche's difficulty. He does so by asserting (apparently as a matter of introspection) that the "être représentatif" which is a perception is of a peculiar sort. It is a subjective state which is experienced as also having intrinsically a "rapport à la chose aperçue"—what a latter-day representationalist would call the "transcendent reference" of the datum or perceptual content. The percept is not a mere separate entity which some outside observer might find to be a counterpart of a physical object; its relation to an object is an essential part of the total experience in which it is given. The duality, then, which Arnauld must here be understood to deny is not the duality of mental percept and physical thing perceived; it is, once more, the specific duality asserted by Malebranche, that of "perceptions" and "êtres représentatifs distingués de nos perceptions".

Other evidence in Arnauld's text in support of the interpretation I have presented is abundant. Quoting, for example, such unqualifiedly dualistic theses as the following: "We do not see things immediately; it is their ideas that are the immediate object of our thoughts, and it is in the idea of each thing that we see its (the thing's) properties," he declares that he "by no means rejects these ways of speaking." Properly understood they are, in his opinion, true; and he even "agrees with the final conclusion drawn from them," namely, that "besides the objects which we know, there is something in our mind which represents them". All that he is concerned to show is that the admission of "ideas" in this sense does not imply the admission of "ideas" in Malebranche's very different sense. "It is," he continues, "of the essence of our thought or perception that it reflects upon itself, . . . *est conscia sui*. I cannot think without being aware that I am thinking." From this consideration and the definition of "perception" already given,

it follows that, every perception being essentially representative of something, and being therefore called an idea, it cannot be essentially self-conscious without having as its immediate object this idea, that is to say, the *réalité objective* of the thing that my mind is said to perceive; so that, if I think of the sun, the *réalité objective* of the sun, which is present to my mind, is the immediate object of this perception, while the possible or existent sun, which is outside of my mind, is, so to say, its mediate object. And thus it may be seen that, without having recourse to representative entities distinct from perceptions, it is very true in this sense, with regard not only to material things but to all

things, that it is our ideas that we see *immediately* and which are the *immediate object of our thought*—which does not prevent us from also seeing, by means of these ideas, the object which contains *formally* what is only *objectivement* in the idea”.¹

I do not know that epistemological dualism could be much more plainly expressed. The sense of this passage has been completely reversed in Mr. Ginsberg's summary of it. He represents Arnauld as maintaining here that in perception, besides the real object and the act of apprehension, there is no “additional entity forming part of the sum of existence”. According to Arnauld, this latest expositor of his doctrine tells us, “in an act of knowing there is only one thing to which existence ought to be ascribed, the process or event of knowing”.² This, surely, is a rather extreme example of that mode of exegesis which proceeds by assuming that an author means something quite different from what he says. It is scarcely conceivable that Mr. Ginsberg supposes a Cartesian writer like Arnauld to have employed the expressions “*réalité objective*” and “*objectivement*” in their modern senses.³ But it should be noted that Arnauld's use of these terms is consonant with the interpretation of his doctrine which I have set forth. “*Réalité objective*” is, in Cartesian terminology, predicable of anything which is actually given, which is “in the mind”; it does not imply that that which is in the mind has either independent existence or external counterpart. And when the “*réalité objective*” of certain content makes us aware of an external object, that object, Arnauld expressly says, is apprehended “through representation in ideas”. His own words are worth citing:—

Je dis qu'une chose est *objectivement* dans mon esprit quand je la conçois. Quand je conçois le soleil, un carré, un son; le soleil, le carré, ce son, sont *objectivement* dans mon esprit, soit qu'ils soient ou qu'ils ne soient hors de mon esprit. . . . Tout ce que nous concevons comme étant dans les objets des idées, tout cela est *objectivement* ou *par représentation* dans les idées mêmes.⁴

The use of “objective” to describe the status of “ideas” or “perceptions” should, moreover, be decisive of the question

¹ *V.F.I.*, pp. 58-59; italics in original.

² Translator's Introduction to Malebranche's *Dialogues*, p. 41.

³ His definition is at any rate divergent from Arnauld's; he makes “objectively” equivalent to “as content of an act of knowing”. But it may, for Arnauld, be equally applied to *any* content.

⁴ *V.F.I.*, pp. 51 and 60; italics in last sentence mine.

whether those "modifications of the mind" are conceived of by Arnauld as mental acts or mental content. For in all Cartesian usage, I take it, that term applies to the matter or content apprehended, not to the process or event of apprehending. An entity is said to have *realitas objectiva quatenus obijcitur intellectui*.¹

The meaning of a further passage sometimes cited as evidence that Arnauld was an Early Father of epistemological monism may now be understood. "When," he writes, "it is said that our ideas and perceptions represent things to us and are images of them, this is to be understood in quite another sense from that in which we say that pictures represent and are images of their originals, or that written or spoken words are images of our thoughts. For when this is said of ideas, it means that things of which we are aware are *objectivement* in our mind or in our thought. And this way of being *objectivement* in the mind is so peculiar to the mind or to thought, as being that which constitutes its distinctive nature, that one would seek in vain for anything like it in that which is not mind or thought."² This, it will be noted, does not say that ideas and perceptions are not images; it says only that they are a unique kind of images. What their uniqueness consists in can be gathered only from the sense elsewhere given by Arnauld to the phrase *être objectivement dans mon esprit* and from his general position. In the light of this, what the passage evidently means is that perceptions or ideas (*a*) are not corporeal replicas of other objects; (*b*) are a kind of images which carry with them, "comme étant ce qui en fait particulièrement la nature," an apprehended relation or reference to entities distinct from themselves and having a mode of existence different from their own merely psychical existence. It is in these respects that they find no parallel among physical images. There is thus nothing in the passage incongruous with the most thorough-going dualism, both epistemological and psycho-physical.

My principal object in this paper has been to set forth Arnauld's own theory of perception, not to review his arguments against the theory of Malebranche. It must, however, be added that in recent expositions these arguments also have usually been misinterpreted. There has been read into them that doctrine of "direct knowledge of real things" which we have seen Arnauld plainly and persistently repudiating; and it is thus that his polemic has been hailed as

¹ Cf. Veitch's notes on this and related terms in his edition of Descartes' *Discourse*, etc., pp. 276-286.

² *V.F.I.*, p. 52.

"the classic exposure" of the theory of representative perception. Philosophers, no doubt, have not infrequently, in assailing their adversaries, refuted also the doctrines they themselves held; but, whatever be thought of the logical implications and of the value of Arnauld's criticisms of Malebranche, it is certain that they were not intended to overthrow an opinion which their author strongly professed.

It is true that some of these arguments, if construed without regard to Arnauld's definitions of his terms, sound very much like attacks upon representationalism in general, and not merely upon Malebranche's peculiar variety of it. For example, much use is made of the principle of parsimony—expressed, as was the fashion of the time, in the form of a compliment to the deity. God, it is well known, always accomplishes his ends by the simplest and most direct means possible. Now, if he intended that we should be capable of perceiving material objects, obviously the simplest way to bring this about was to enable us to apprehend such objects "immediately". "It would, therefore, be inconsistent with his wisdom to employ any such 'representative entity' [as Malebranche had supposed] intimately united with my mind, whatever it may be."¹

"It is the physical object that I need to perceive, since it can be useful or harmful to me in the preservation of my bodily existence; whereas that 'representative entity' which I am told I must first perceive, can do it neither good nor harm. Since, then, it is after all necessary that I should in the end attain to a perception of the physical object, without which my mind, which has need of apprehending it, never will apprehend it, . . . why should not the infinitely perfect Being, who acts always by the simplest means, have brought me to that end directly (*tout d'un coup*)? What likelihood is there that he would have taken a course so round-about and so useless in order to accomplish his purpose of rendering my soul capable of perceiving bodies?"²

If Arnauld meant by "immediate" what some contemporary realists mean by it, such a passage as this would certainly prove—not, indeed, that his formal doctrine was identical with theirs—but that, in the ardour of controversy, he made use of arguments as fatal to his own view as to his opponent's. In fact, however, he took pains to warn his readers in advance against misconstruing his use of that term. "Since," he

¹ *V.F.L.*, p. 86.

² *Ibid.*, p. 83.

writes at the end of an early chapter in *Des vraies et des fausses idées*,

"my principal object in this chapter has been to clear away the equivocality of the word 'immediately,' I declare here that if, by being 'immediately' aware of the sun, a square, *etc.*, is meant something opposed to being aware of them by means of ideas, as I have defined them, *i.e.*, of ideas not distinct from perceptions—then I agree that we do not see these things immediately, since it is clearer than day that we see, perceive, know them only by the perceptions of them that we have."¹

The theory of mediate perception which he is criticising is, then, still that which would introduce, not a *tertium* but a *quartum quid*; it is the doctrine which would add to the real object, the mind, and the idea or percept as a modification of the mind—all of which Arnauld accepted implicitly—an essence at once non-mental, immaterial, and non-sensuous, as the sole means of our apprehension of the characters of material things. An immediatism which should dispense with ideas and percepts altogether was not within Arnauld's intellectual horizon.

It would be tedious, and it is not necessary, to review all the other arguments of Arnauld against Malebranche, in order to show that they also can and should be interpreted in the same manner. Enough evidence has been presented, I think, to make it clear that the notion which has gained currency concerning the nature of Arnauld's doctrine and his historic significance is an interesting but ill-founded legend, which entirely misrepresents the point at issue in the controversy and distorts the history of early modern reflection upon the problem of knowledge. It is true that some of the considerations which the great Jansenist presented as objections to Malebranche's theory of ideas would be more sweepingly applied by monistic realists to-day as arguments against any sort of representative theory. When, for example, Arnauld argues that if we never had before our minds anything but essences, it would follow that we are "condemned never to see any body" and that we "live in a perpetual illusion in supposing ourselves to behold the material things which God has created," he is reasoning in a manner similar to that of contemporary realists who contend that the doctrine of representative perception implies the impossibility of any knowledge of either the existence or the character of physical

¹ *V.F.I.*, p. 66.

realities. But he is arguing to a different conclusion—and to precisely the conclusion which these contemporary writers are assailing.

It is, moreover, a mistake to represent Arnauld as having, even in an unintentional and indirect way, suggested a decisive or even an effective mode of attack upon representational dualism. For the chief strongholds of such dualism are the facts of error, dream and illusion, and those of memory and forecast. Of the latter problem Arnauld seems hardly aware at all; and his explanation of perceptual error is of the familiar dualistic sort. In error or illusion we simply have "modifications de l'âme" for which there exist no external counterparts; "la perception de plusieurs choses est actuellement dans notre esprit, quoique ces choses ne soient pas actuellement hors de nous".¹ It is pretty evident, in fact, that one of the grounds of his conviction that representative mental entities are indispensable in veridical perception is the difficulty of dispensing with the concept of misrepresentative mental entities in the explanation of error. Malebranche, on the other hand, is at this point also a true precursor of some of our monistic realists. For him the objects of error, dream, hallucination, and imagination are, like those of true perception, objective essences immediately apprehended; they are not created by the mind nor in any proper sense mental entities. They merely happen to be essences for which God has not seen fit to create material embodiments. "When one thinks of possible objects which do not actually exist, *e.g.*, a flat earth, a cubical sun, a mountain of gold, . . . it is not true that one is thinking of nothing. Though the mind thinks indirectly of things which do not actually exist, it is aware directly and immediately of their ideas. Since these are not nothing, one cannot say that the mind is thinking of nothing when they are present to it."² Thus the poet (or the madman), Malebranche's argument implies, enjoys an experience not wholly without analogy to that of God before the creation, when he "had present to him the ideas of all possible

¹ *V.F.I.*, pp. 54, 55-56, 79-81.

² In *Recueil de toutes les réponses du Père Malebranche, etc.*, 1709, vol. iv., 20. Cf. *id.*, 122 f., where Malebranche tells us that when a man feels a pain in an arm that has been amputated, it is of an "ideal arm" that he is aware; "it is solely the intelligible extension" of the arm "which acts in his mind and disturbs it with the painful modification or perception" that he experiences. Thus the "ideal arm" is "un bras efficace et représentatif de son bras inefficace". When I see a centaur in a dream, "je le vois comme un être distingué de moi," and therefore even this illusory object is not "une modification de ma substance" (*Rép. à la défense, etc.*, *ibid.*, i., 88).

worlds" not yet existent. Malebranche's account of error, then, in some essentials resembles that proposed in our time by Prof. W. P. Montague, *viz.*, that to err means simply to be aware of "unreal subsistents," objective logical entities which are what they are quite independently of the mind but chance not to belong to the "space-time system of existents".¹

¹ *The New Realism*, 253-255; cf. the same writer's "Unreal Subsistence and Consciousness," *Philos. Rev.*, xviii., 49-54.

V.—DISCUSSION.

PROPOSITIONS APPLICABLE TO THEMSELVES.

1. MR. L. WITTGENSTEIN in his *Tractatus Logico-Philosophicus* (p. 57) remarks, what has often, of course, been said before, that no proposition can "say anything about itself" ("etwas ueber sich selbst aussagen"). There is a sense in which, I think, this is clearly true. But the statement is rather ambiguous, and requires further specification.

2. The proposition "Charles I. was crowned" is clearly about Charles I. It is only a definite proposition if it contains an exclusive description of the man—one which is true of nothing but him. But how about "all kings of England are mortal"? This cannot be said to be about Charles I. It can have a definite meaning for a person who knew no exclusive description of Charles I., or even for one who supposed that all kings of England were named Henry. Yet whatever is said of all kings of England is true of Charles I. I cannot tell from Mr. Wittgenstein's words whether he would say that this was or was not a proposition about Charles I. The terminology I propose to adopt is that the first proposition is *about* Charles I., while the second is *not about* him, but *applies* to him.

3. It is clear that no proposition can, in this sense, be about itself. Let us take an example. "The proposition which I am now asserting is known to God." (It is better to say "known to God" than "true" or "false," since the two last predicates have special relations to propositions which might raise a suspicion that they were not fair representatives of all other predicates.) Let us call this A. Now it is clear that this assertion depends for its meaning on the meaning of the proposition which I assert, and which is known to God. But to the question "what proposition am I asserting," the only answer is "it is the proposition 'the proposition which I am now asserting is known to God' ". And this raises the same question, which can only receive the same answer, and so on to infinity. And this infinite will be vicious. No link in the chain can have any meaning until the chain is finished. And it never is finished. The original statement, then, is neither true nor false, and is not a proposition.

4. A proposition, then, cannot be about itself. But can it apply to itself? How about "all propositions asserted by me are known to God"? But "all" here is ambiguous. In the proposition "all Cambridge Colleges in 1922 had at least twenty members," the as-

sertion really is, as it professes to be, about each Cambridge College in 1922. And it depends on the truth of seventeen separate propositions, such as "Peterhouse in 1922 had at least twenty members". Any one of these seventeen could be true without the proposition about "all Cambridge Colleges," being true, but it cannot be true unless all the seventeen are true.

But then this proposition is not deducible from the nature of a Cambridge College in 1922. Something which had only ten members could have been such a College—only nothing was. But take the proposition "all Cambridge Colleges in 1922 have privileges under the Law of Mortmain". This is quite different. It is not dependent on propositions about each of the existent Colleges, nor even on the existence of any of them. If every Cambridge College had been abolished in 1921, and no more founded, it would still be true, unless the Law of Mortmain had been altered, that "all Cambridge Colleges in 1922 have privileges under the Law of Mortmain". And the explanation is that the proposition is incorrectly expressed. It is not an assertion about Cambridge Colleges in 1922, but about the *characteristics* "being a Cambridge College in 1922," and "having privileges under the Law of Mortmain". And it asserts that the possession of the first characteristic implies the possession of the second.

5. Now if the sentence "All propositions asserted by me are known to God" is taken in the first of these senses (let us call this B), then it, like A, has no meaning. For it is an assertion dependent on each of the propositions asserted by me, and its meaning depends on the meanings of each of them. But B itself, if it is a proposition at all, is a proposition asserted by me. Its meaning, therefore, will depend, *inter alia*, on its meaning. And when we ask what is the meaning of B on this second occurrence the answer will be that it, again, depends on the meaning of B. And this infinite series will be vicious, since the meaning of B could only be determined on the completion of the series, which never is completed. B, therefore, has no meaning, and is not a proposition.

6. But the case is very different if the words "all propositions asserted by me are known to God" are taken in the second sense mentioned in Section 4. (Let us call this C.) For C is not an assertion about a proposition, or about a number of propositions. It is an assertion that the possession of the characteristic "being a proposition asserted by me" implies the possession of the characteristic "being known to God". And this is a proposition about characteristics, not about one or more propositions. It is not, therefore, a proposition about itself, or about a number of propositions of which it itself is one. The determination of its meaning does not depend on the previous determination of its meaning. And therefore it can, and does, have a meaning. And it is a proposition.

But, of course, it applies to itself, since it is a proposition asserted by me. And so, from the fact that I assert the proposition

C, can be deduced the further proposition, D, "the proposition C is known to God". But this creates no difficulty, for neither proposition is about itself. C is about the implication of characteristics, and D is about C.

7. We may remark, in parenthesis, that, not only can a proposition apply to itself, but it can apply, in some cases, to itself alone. If the possession of the characteristic "being a proposition asserted by me" implies the possession of the characteristic "being known to God," then it is clear that the possession of the characteristic "being the last proposition asserted by me before my next death" implies the possession of the characteristic "being known to God". Now only one thing can possess the characteristic of being the last proposition asserted by me before my next death. And if I should assert this implication, and die before I asserted anything else, then the proposition would apply to itself, and to nothing else but itself. But it would not be about itself in the manner in which I have taken that phrase, and it would not be liable to the difficulties, mentioned in Section 3, which prevent A from being a proposition.

8. To return from this digression. It has often been pointed out that the complete scepticism which says that all propositions are false is self-contradictory, because it is itself a proposition, and therefore its truth would prove its falsity. To this I have heard the objection that a proposition cannot be about itself, and that therefore such a scepticism is not self-contradictory, but impossible.

Now, no doubt, if the words "all propositions are false" were taken in sense B, they would be unmeaning, for the reasons given in Section 5. But not even an absolute sceptic would have so much confidence in his own omniscience as to suppose that he had examined all propositions, and found each of them individually to be false, as each Cambridge College was found to have at least twenty members. If the words are ever used, they will be used in sense C—that the possession of the characteristic of being a proposition implies the possession of the characteristic of being false. Now this, for the reasons mentioned in Section 6, has a meaning, and is a proposition. But it is a self-contradictory proposition. For it applies to itself, and so the proposition, C, implies the further proposition, D, that C is false. Thus the truth of C implies its falsity.

In the same way the words "all propositions which are believed are false" have a meaning, and are the statement of a proposition. Here the proposition is not strictly speaking *self-contradictory*, but its truth, together with the truth of the assertion that the sceptic believes it, implies its falsity.

J. ELLIS MCTAGGART.

VI.—CRITICAL NOTICES.

Tractatus Logico-Philosophicus. By LUDWIG WITTGENSTEIN, with an Introduction by BERTRAND RUSSELL. (International Library of Psychology, Philosophy and Scientific Method.) London: Kegan Paul, Trench, Trubner & Co. Ltd., 1922. Pp. 189. 10s. 6d.

THIS is a most important book containing original ideas on a large range of topics, forming a coherent system, which whether or not it be, as the author claims, in essentials the final solution of the problems dealt with, is of extraordinary interest and deserves the attention of all philosophers. And even if the system be altogether unsound the book contains a large number of profound *obiter dicta* and criticisms of other theories. It is, however, very difficult to understand, in spite of the fact that it is printed with the German text and an English translation on opposite pages. Mr. Wittgenstein writes, not consecutive prose, but short propositions numbered so as to show the emphasis laid upon them in his exposition. This gives his work an attractive epigrammatic flavour, and perhaps makes it more accurate in detail, as each sentence must have received separate consideration; but it seems to have prevented him from giving adequate explanations of many of his technical terms and theories, perhaps because explanations require some sacrifice of accuracy.

This deficiency is partly made up by Mr. Russell's introduction; but it is possible that he is not an infallible guide to Mr. Wittgenstein's meaning. "In order to understand Mr. Wittgenstein's book," says Mr. Russell, "it is necessary to realise what is the problem with which he is concerned. In the part of his theory which deals with symbolism he is concerned with the conditions that would have to be fulfilled by a logically perfect language." This seems to be a very doubtful generalisation; there are, indeed, passages in which Mr. Wittgenstein is explicitly concerned with a logically perfect, and not with any language, *e.g.*, the discussion of "logical syntax" in 3.325 ff.; but in general he seems to maintain that his doctrines apply to ordinary languages in spite of the appearance of the contrary (see especially 4.002 ff.). This is obviously an important point, for this wider application greatly increases the interest and diminishes the plausibility of any thesis such as that which Mr. Russell declares to be perhaps the most fundamental in Mr. Wittgenstein's theory: that "In order that a certain sentence should assert a certain fact there must, however the language may

be constructed, be something in common between the structure of the sentence and the structure of the fact".

This doctrine appears to depend on the difficult notions of a "picture" and its "form of representation," which I shall now try to explain and criticise.

A picture is a fact, the fact that its elements are combined with one another in a definite way. These elements are co-ordinated with certain objects (the constituents of the fact of which the picture is a picture). These co-ordinations constitute the representing relation which makes the picture a picture. This representing relation "belongs to the picture" (2.1513); this I think means that whenever we talk of a picture we have in mind some representing relation in virtue of which it is a picture. Under these circumstances we say that the picture represents that the objects are so combined with another as are the elements of the picture, and this is the sense of the picture. And I think this must be taken to be the definition of "represents" and of "sense"; that is to say, that when we say that a picture represents that certain objects are combined in a certain way, we mean merely that the elements of the picture are combined in that way, and are co-ordinated with the objects by the representing relation which belongs to the picture. (That this is a definition, follows, I think, from 5.542.)

Light may be thrown on the "form of representation" by the following remarks made earlier in the book on the structure and form of facts. "The way in which objects hang together in the atomic fact is the structure of the atomic fact. The form is the possibility of the structure. The structure of the fact consists of the structures of the atomic facts" (2.032, 2.033, 2.034). The only point which I can see in the distinction between structure and form, is that the insertion of "possibility" may include the case, in which the alleged fact whose form we are considering is not a fact, so that we can talk of the form of the fact aRb , whether or no aRb is true, provided it is logically possible. It is to be regretted that the above definitions do not make it clear whether two facts can ever have the same structure or the same form; it looks as if two atomic facts might well have the same structure, because objects hung together in the same way in each of them. But it seems from remarks later in the book that the structure of the fact is not merely the way in which the objects hang together but depends also on what objects they are, so that two different facts never have the same structure.

A picture is a fact and as such has a structure and a form: we are, however, given the following new definitions of its "structure" and its "form of representation" in 2.15, 2.151. "That the elements of the picture are combined with one another in a definite way, represents that the things are so combined with one another. This connexion of the elements of the picture is called its structure, and the possibility of this structure is called the form of representa-

tion of the picture. The form of representation is the possibility that the things are so combined with one another as are the elements of the picture." This passage is puzzling; firstly, because we have here two different definitions of the form of representation, and secondly, because it is not obvious how to interpret "this connexion" in the first of the two definitions; it may refer to the definite way in which the elements are combined, or to the whole of the preceding sentence, *i.e.*, "this connexion of the elements" may be that their combination represents a similar combination of the things. On neither interpretation does the first definition seem to coincide with the second. We can only hope to decide between these possible meanings of "form of representation" by considering the things which Mr. Wittgenstein says about it. Its chief property, which makes it of fundamental importance in his theory, is that asserted in 2.17: "What the picture must have in common with reality in order to be able to represent it after its manner—rightly or falsely—is its form of representation". Further, "what every picture, of whatever form, must have in common with reality in order to be able to represent it at all—rightly or falsely—is the logical form, that is, the form of reality. If the form of representation is the logical form, then the picture is called a logical picture. Every picture is *also* a logical picture. (On the other hand, for example, not every picture is spatial.)" (2.18, 2.181, 2.182). It appears, then, that a picture may have several forms of representation, but one of these must be *the* logical form; and that it is not asserted that the picture must have the same logical form as what it pictures, but that all pictures must have *the* logical form. This also makes more plausible the deduction that the logical form of representation cannot be represented; for, that it was common to one picture and reality, could afford no ground for supposing that it could not be represented in another picture.

Now it is easy to see a sense in which a picture may have the spatial and must also have the logical form, namely, by taking the form to be the (possibility of the) way in which the elements of the picture are combined. (One of the interpretations of the first definition given above.) This may be logical, as when the colour of a patch on a map represents the height above sea level of the corresponding patch of country; the elements of the picture are combined as predicate and subject and this represents that the corresponding things are also combined as predicate and subject. On the other hand the form may be spatial as when one dot being between two others represents that a certain town is between two others; but in this case we can also regard betweenness not as the way in which the dots are combined but as another element in the picture, which corresponds with itself. Then since betweenness and the dots are combined, not spatially, but as triple relation and its relata, that is logically, the form is logical. Here then we have something which may be spatial and must also be logical; but it does not follow that this is the form of representation, for the form

of representation may be some more complicated entity involving this and so derivatively spatial or logical. If, indeed, the above were what were meant by the form of representation, then in saying that a picture must have the logical form Mr. Wittgenstein would be saying no more than that it must be a fact; and in saying that we cannot represent or speak about the logical form of representation, no more than that we cannot talk about what makes a fact a fact, nor ultimately *about* facts at all, because every statement apparently about facts is really about their constituents. These things he certainly believes, but it seems to me unlikely that his complicated propositions about the form of representation amount to no more than this. Probably he is confused and does not use the term consistently; and if we revert to the second of the definitions given above, "The form of representation is the possibility that the things are so combined with one another as are the elements of the picture," we may discover another sense in which the picture has the form of representation in common with the pictured, namely, that the things with which its elements are co-ordinated by the representing relation are of such types that they *can* be combined in the same way as the elements of the picture; and so we arrive at the important principle that "The picture contains the possibility of the state of affairs which it represents" (2.203). It seems to me, for reasons explained later, that the independent acceptance of this principle will justify almost all the non-mystical deductions which Mr. Wittgenstein makes from the necessity of something in common between the picture and the world, which cannot itself be represented; and that these deductions can so be given a firmer basis than is provided by the nature of this elusive entity, the form of representation, which is intrinsically impossible to discuss.

In order to obtain any further comprehension of what Mr. Wittgenstein thinks a sentence must have in common with the fact which it asserts, or, indeed, of most of his book, it is necessary to understand his use of the word "*proposition*". This is, I think, made easier by the introduction of two words used by C. S. Peirce. A word, in the sense in which there are a dozen words 'the' on a page, he called a *token*; and these dozen tokens are all instances of one *type*, the word 'the'. Besides "word" there are other words which have this type-token ambiguity; thus a sensation, a thought, an emotion or an idea may be either a type or a token. And in Mr. Wittgenstein's usage, in contrast, for instance, to Mr. Russell's in the *Principles of Mathematics*, "proposition" also has type-token ambiguity.

A *propositional sign* is a sentence; but this statement must be qualified, for by "sentence" may be meant something of the same nature as the words of which it is composed. But a propositional sign differs essentially from a word because it is not an object or class of objects, but a fact, "the fact that its elements, the words, are combined in it in a definite way" (3.14). Thus "propositional sign" has type-token ambiguity; the tokens (like those of any

sign) are grouped into types by physical similarity (and by conventions associating certain noises with certain shapes) just as are the instances of a word. But a *proposition* is a type whose instances consist of all propositional sign tokens which have in common, not a certain appearance, but a certain *sense*.

As to the relation between a proposition and a thought Mr. Wittgenstein is rather obscure; but I think his meaning is that a thought is a type whose tokens have in common a certain sense, and include the tokens of the corresponding proposition, but include also other non-verbal tokens; these, however, are not relevantly different from the verbal ones, so that it is sufficient to consider the latter. He says "It is clear that 'A believes that p ,' 'A thinks p ,' 'A says p ,' are of the form ' p says p '" (5.542), and so explicitly reduces the question as to the analysis of judgment, to which Mr. Russell has at various times given different answers, to the question "What is it for a proposition token to have a certain sense?" This reduction seems to me an important advance, and as the question to which it leads is of fundamental importance, I propose to examine carefully what Mr. Wittgenstein says by way of answering it.

First it may be remarked that if we can answer our question we incidentally solve the problem of truth; or rather it is already evident that there is no such problem. For if a thought or proposition token " p " says p , then it is called true if p , and false if $\neg p$. We can say that it is true if its sense agrees with reality, or if the possible state of affairs which it represents is the actual one, but these formulations only express the above definition in other words.

According to Mr. Wittgenstein a proposition token is a logical picture; and so its sense should be given by the definition of the sense of a picture; accordingly the sense of a proposition is that the things meant by its elements (the words) are combined with one another in the same way, as are the elements themselves, that is, logically. But it is evident that, to say the least, this definition is very incomplete; it can be applied literally only in one case, that of the completely analysed elementary proposition. (It may be explained that an elementary proposition is one which asserts the existence of an atomic fact, and that a proposition token is completely analysed if there is an element in it corresponding to each object occurring in its sense.) Thus if " a " means a , " b " b , and " R ," or more accurately the relation we establish between " a " and " b " by writing " aRb ," means R , then that " a " stands in this relation to " b " says that aRb , and this is its sense. But this simple scheme must evidently be modified, if, for example, one word is used for "having R to b " so that the proposition is not completely analysed; or if we have to deal with a more complicated proposition which contains logical constants such as "not" or "if," which do not represent objects as names do. Mr. Wittgenstein does not make it quite clear how he proposes to deal with either of these difficulties. As regards the first, which he almost ignores, he

may reasonably plead that it results from the enormous complication of colloquial language, which cannot be disentangled *a priori*; for in a perfect language all propositions would be completely analysed except when we defined a sign to take the place of a string of simple signs; then, as he says, the defined sign would signify *via* the signs by which it is defined. But the other difficulty must be faced, since we cannot be satisfied with a theory which deals only with elementary propositions.

The sense of propositions in general is explained by reference to elementary propositions. With regard to n elementary propositions there are 2^n possibilities of their truth and falsehood, which are called the truth-possibilities of the elementary propositions; similarly there are 2^n possibilities of existence and non-existence of the corresponding atomic facts. Mr. Wittgenstein says that any proposition is the expression of agreement and disagreement with the truth-possibilities of certain elementary propositions, and its sense is its agreement and disagreement with the possibilities of existence and non-existence of the corresponding atomic facts. (4.4, 4.2.)

This is illustrated by the following symbolism for truth-functions. T stands for true, F for false and we write the 4 possibilities for 2 elementary propositions thus :—

p	q
T	T
F	T
T	F
F	F

Now by setting a T against a possibility for agreement and leaving a blank for disagreement we can express, for example, $p \supset q$, thus :

p	q	
T	T	T
F	T	T
T	F	
F	F	T

Or, adopting a conventional order for the possibilities, $(TT-T)(p, q)$. Evidently this notation does not in any way require p, q to be elementary propositions; and it can be extended to include propositions containing apparent variables. Thus p, q may be given

not by enumeration but as all values of a propositional function, *i.e.*, all propositions containing a certain expression (defined as "any part of a proposition which characterises its sense" (3·31)); and $(\text{---} \text{---} \text{---} \text{---} \text{T})(\xi)$, where the solitary T expresses agreement only with the possibility that all the arguments are false, and ξ is the set of values of fx , is what is written ordinarily as $\neg : (\text{gx}) . \text{fx}$. So every proposition is a truth-function of elementary propositions, and many differently constructed propositional signs are the same proposition, because, expressing agreement and disagreement with the same truth-possibilities, they have the same sense and are the same truth-function of elementary propositions. Thus :

$q \supset p : \neg q \supset p$ and $\neg(\neg p \vee \neg)$ are the same as p .

This leads to an extremely simple theory of inference; if we call those truth-possibilities with which a proposition agrees, its truth-grounds, then q follows from p , if the truth-grounds of p are contained among those of q . In this case Mr. Wittgenstein also says that the sense of q is contained in that of p , that in asserting p we are incidentally asserting q . I think this statement is really a definition of containing as regards senses, and an extension of the meaning of assert partly in conformity with ordinary usage, which probably agrees as regards p, q and $p, \text{ or } (x).fx$ and fa but not otherwise.

There are two extreme cases of great importance; if we express disagreement with all the truth-possibilities we get a *contradiction*, if agreement with them all, a *tautology*, which says nothing. The propositions of logic are tautologies and to have made clear this, their essential characteristic, is a remarkable achievement.

We have now to consider whether the above is an adequate account of what it is for a proposition token to have a certain sense; and it seems to me that it certainly is not. For it is really only an account of what senses there are, not of what propositional signs have what sense. It enables us to substitute for " 'p' says p," " 'p' expresses agreement with these truth-possibilities and disagreement with these others," but the latter formulation cannot be regarded as an ultimate analysis of the former, and it is not at all clear how its further analysis proceeds. We have therefore to look elsewhere for the answer to our question. Towards this answer Mr. Wittgenstein does make a clear contribution; in 5.542, he says that in " 'p' says p " we have a co-ordination of facts by means of a co-ordination of their objects. But this account is incomplete because the sense is not completely determined by the objects which occur in it; nor is the propositional sign completely constituted by the names which occur in it, for in it there may also be logical constants which are not co-ordinated with objects and complete the determination of the sense in a way which is left obscure.

If we had only to deal with one logical symbolism I do not think there would be any difficulty. For, apart from variation in the names used, there would be a rule giving all propositional signs

which, in that symbolism, had a certain sense, and we could complete the definition of "sense" by adding to it these rules. Thus "p" says that $\neg aRb$ would, supposing us to be dealing with the symbolism of *Principia Mathematica*, be analysed as follows: call anything meaning a, "a" and so on, and call "a" "R" "b" "q"; then "p" is either $\neg q$ or $\neg\neg\neg q$ or $\neg q \vee \neg q$ or any of the other symbols constructed according to a definite rule. (It may, of course, be doubted whether it is possible to formulate this rule as it seems to presuppose the whole of symbolic logic; but in any perfect notation it might be possible; for example in Mr. Wittgenstein's notation with T's and F's there would be no difficulty.) But it is obvious that this is not enough; it will not give an analysis of "A asserts p" but only of "A asserts p using such and such a logical notation". But we may well know that a Chinaman has a certain opinion without having an idea of the logical notation he uses. Also the evidently significant statement that Germans use "nicht" for not becomes part of the definition of such words as "believe," "think" when used of Germans.

It is very hard to see a way out of this difficulty; one may perhaps be found in Mr. Russell's suggestion in the *Analysis of Mind* (p. 250), that there may be special belief feelings occurring in disjunction and implication. Logical constants might then be significant as substitutes for these feelings, which would form the basis of a universal logical symbolism of human thought. But it looks as if Mr. Wittgenstein believes in another kind of solution, going back to his earlier statement that the sense of a picture is that the things are so combined with one another as are the elements of the picture. The natural interpretation of this in our present context is that we can only represent that *a* does not have a certain relation to *b*, by making "*a*" not have a certain relation to "*b*," or in general that only a negative fact can assert a negative fact, only an implicative fact an implicative fact and so on. This is absurd and evidently not what he means; but he does seem to hold that a proposition token resembles its sense somehow in this sort of way. Thus he says (5.512), "That which denies in ' $\neg p$ ' is not ' \neg ' but that which all signs of this notation, which deny *p*, have in common. Hence the common rule according to which ' $\neg p$,' ' $\neg\neg p$,' ' $\neg p \vee \neg p$,' ' $\neg p \cdot \neg p$,' etc. etc. (to infinity) are constructed. And this which is common to them all mirrors denial." I cannot understand how it mirrors denial. It certainly does not do so in the simple way in which the conjunction of two propositions mirrors the conjunction of their senses. This difference between conjunction and the other truth-functions can be seen in the fact that to believe *p* and *q* is to believe *p* and to believe *q*; nor to believe *p* or *q* is not the same as to believe *p* or to believe *q*, nor to believe not *p* as not to believe *p*.

We must now turn to one of the most interesting of Mr. Wittgenstein's theories, that there are certain things which cannot be said but only shown, and these constitute the Mystical. The

reason why they cannot be said is that they have to do with the logical form, which propositions have in common with reality. What sort of things they are is explained in 4.122. "We can speak in a certain sense of formal properties of objects and atomic facts, or of properties of the structure of facts, and in the same sense of formal relations and relations of structures. (Instead of property of the structure I also say 'internal property'; instead of relation of structures 'internal relation'. I introduce these expressions in order to show the reason for the confusion, very widespread among philosophers, between internal relations and proper (external) relations.) The holding of such internal properties and relations cannot, however, be asserted by propositions, but shows itself in the propositions, which present the atomic facts and treat of the objects in question." As I have already said, it does not seem to me that the nature of the logical form is sufficiently clear to provide any cogent arguments in favour of such conclusions; and I think that a better approach to the treatment of internal properties may be given by the following criterion: "A property is internal if it is unthinkable that its object does not possess it" (4.123).

It is a principle of Mr. Wittgenstein's, and, if true, is a very important discovery, that every genuine proposition asserts something possible, but not necessary. This follows from his account of a proposition as the expression of agreement and disagreement with truth-possibilities of independent elementary propositions, so that the only necessity is that of tautology, the only impossibility that of contradiction. There is great difficulty in holding this; for Mr. Wittgenstein admits that a point in the visual field *cannot* be both red and blue; and, indeed, otherwise, since he thinks induction has no logical basis, we should have no reason for thinking that we may not come upon a visual point which is both red and blue. Hence he says that "This is both red and blue" is a contradiction. This implies that the apparently simple concepts red, blue (supposing us to mean by those words absolutely specific shades) are really complex and formally incompatible. He tries to show how this may be, by analysing them in terms of vibrations. But even supposing that the physicist thus provides an analysis of what we mean by "red" Mr. Wittgenstein is only reducing the difficulty to that of the *necessary* properties of space, time, and matter, or the ether. He explicitly makes it depend on the *impossibility* of a particle being in two places at the same time. These necessary properties of space and time are hardly capable of a further reduction of this kind. For example, considering between in point of time as regards my experiences; if B is between A and D and C between B and D, then C must be between A and D; but it is hard to see how this can be a formal tautology.

But not all apparently necessary truths can be supposed, or are by Mr. Wittgenstein supposed, to be tautologies. There are also the internal properties of which it is unthinkable that their objects

do not possess them. Sentences apparently asserting such properties of objects are held by Mr. Wittgenstein to be nonsense, but to stand in some obscure relation to something inexpressible. This last seems to be involved by his reason for thinking that they are nonsense, which is that what they are meant to assert cannot be asserted. But it seems to me possible to give reasons why these sentences are nonsense and a general account of their origin and apparent significance, which have no mystical implications.

Sentences of this kind, which we call "pseudo-propositions," arise in various ways depending on our language. One source is the grammatical necessity for such nouns as "object" and "thing" which do not like ordinary common nouns correspond to propositional functions. Thus from "this is a red object" appears to follow the pseudo-proposition "this is an object," which in the symbolism of *Principia Mathematica* could not be written at all. But the commonest and most important source is the substitution of names or relative names for descriptions. (I use "relative names" to include "p," the expression for a given sense p; in contrast to a description of that sense, such as "what I said.") Usually this is legitimate; for, if we have a propositional schema containing blanks, the significance of the schema when the blanks are filled by descriptions presupposes, in general, its significance when they are filled by the names of things answering to the descriptions. Thus the analysis of "The ϕ is red" is "There is one and only one thing which is ϕ ; and it is red" and the occurrence in this of "it is red" shows that the significance of our proposition presupposes the significance of " a is red" where a is of the type of the ϕ . But sometimes this is not the case because the proposition containing the description must be analysed a little differently. Thus "The ϕ exists" is not "There is one and only one thing which is ϕ ; and it exists," but simply "There is one and only one thing which is ϕ "; so that its significance does not presuppose that of " a exists," which is nonsense, for its truth could be seen by mere inspection without comparison with reality, as is never the case with a genuine proposition. But partly because we sometimes fail to distinguish " a exists," from "The object meant by ' a ' exists," and partly because "— exists" is always significant when the blank is filled by a description, and we are not sufficiently sensitive to the difference between descriptions and names; " a exists" sometimes feels as if it were significant. Mr. Wittgenstein gives in to this deceptive feeling so far as to hold that the existence of the name " a " shows that a exists, but that this cannot be asserted; it seems, however, to be a principal component in the mystical: "Not *how* the world is, is the mystical, but *that* it is" (6'44).

Our next example is provided by identity, of which Mr. Wittgenstein gives an important destructive criticism; "Russell's definition of ' $=$ ' won't do; because according to it one cannot say that two objects have all their properties in common. (Even if this proposition is never true it is nevertheless significant)" (5'5302). And

" $a = b$ " must be a pseudo-proposition since it is true or false *a priori* according as " a ," " b " are names for the same, or different things. If now we adopt the new convention that two different signs in one proposition must have different meanings, we get a new analysis of descriptions not involving identity. For $f(1x) (\phi x)$

instead of
we have

$$(\exists c) : \phi x \supset_x x = c . fc$$

$$(\exists x) . \phi x . fx : \neg (\exists x, y) . \phi x . \phi y.$$

And since $(1x) (\phi x) = c$ is analysed as $\phi c : \neg (\exists x, y) . \phi x . \phi y$ we see that " $\neg =$ " is only significant when one blank at least is filled by a description. Incidentally this rejection of identity may have serious consequences in the theory of aggregates and cardinal number; it is, for example, hardly plausible to say that two classes are only of equal number when there is a one-one relation whose domain is the one and converse domain the other, unless such relations can be constructed by means of identity.

Next I shall show how this account applies to internal properties of the senses of propositions, or, if they are true propositions, the corresponding facts. " p is about a " is an example; its significance might be thought to follow from that of " $\text{He said something about } a$ "; but if we reflect on the analysis of the latter proposition we shall see that this is not the case; for it evidently reduces not to " $\text{There is } p$, which he asserted and which is about a " but to " $\text{There is a function } \phi \text{ such that he asserted } \phi a$," which does not involve the pseudo-proposition " p is about a ". Similarly " p is contradictory to q " might be thought to be involved in " $\text{He contradicted me}$ "; but it is seen to be a pseudo-proposition when we analyse the latter as " $\text{There is } p \text{ such that I asserted } p$, he $\neg p$ ". Of course this is not a complete analysis, but it is the first step and sufficient for our present purpose and shows how " \neg is contradictory to—" is only significant when one blank at least is filled by a description.

Other pseudo-propositions are those of mathematics, which, according to Mr. Wittgenstein are equations obtained by writing " $=$ " between two expressions which can be substituted for one another. I do not see how this account can be supposed to cover the whole of mathematics, and it is evidently incomplete since there are also inequalities, which are more difficult to explain. It is, however, easy to see that " $\text{I have more than two fingers}$ " does not presuppose the significance of " $10 > 2$ "; for, remembering that different signs must have different meanings, it is simply " $(\exists x, y, z) : x, y, z \text{ are fingers of mine}$ ".

Just as the explanation of some apparently necessary truths as tautologies met with difficulty in the field of colour, so does the explanation of the remainder as pseudo-propositions. " $\text{This blue colour and that}$," says Mr. Wittgenstein, " $\text{stand in the internal relation of brighter and darker } eo ipso$. It is unthinkable that *these* two objects should not stand in this relation" (4.123). Accordingly a sentence apparently asserting that one named colour is brighter

than another named colour must be a pseudo-proposition; but it is hard to see how this can be reconciled with the indubitable significance of a sentence asserting that a described colour is brighter than another, such as "My cushion at home is brighter than my carpet". But in this case the difficulty could be completely removed by the supposition that the physicist is really analysing the meaning of "red;" for his analysis of a colour comes eventually to a number, such as the length of a wave or what not, and the difficulty is reduced to that of reconciling the non-significance of an inequality between two given numbers with the significance of an inequality between two described numbers, which is evidently somehow possible on the lines suggested for "I have more than two fingers" above.

Let us now pass to Mr. Wittgenstein's account of philosophy. "The object of philosophy," he says, "is the logical clarification of thoughts. Philosophy is not a theory but an activity. A philosophical work consists essentially of elucidations. The result of philosophy is not a number of philosophical propositions but to make propositions clear. Philosophy should make clear and delimit sharply the thoughts which otherwise are, as it were, opaque and blurred" (4.112). It seems to me that we cannot be satisfied with this account without some further explanation of "clarity," and I shall try to give an explanation in harmony with Mr. Wittgenstein's system. I think that a written sentence is "clear" in so far as it has *visible* properties correlated with or "showing" the internal properties of its sense. According to Mr. Wittgenstein the latter always show themselves in internal properties of the proposition; but owing to the type-token ambiguity of "proposition" it is not immediately clear what this means. Properties of a proposition must, I think, mean properties of all its tokens; but, the internal properties of a proposition are those properties of the tokens which are, so to speak, internal not to the tokens but to the type; that is, those which, one of the tokens must have if it is to be a token of that type, not those which it is unthinkable that it should not have anyhow. We must remember that there is no *necessity* for a sentence to have the sense it does in fact have; so that if a sentence says *fa*, it is not an internal property of the sentence that there is something in it somehow connected with *a*; but this is an internal property of the proposition, because the sentence could not otherwise belong to that proposition type, *i.e.*, have that sense. So we see that the internal properties of a proposition which show those of its sense are not, in general, visible ones, but complicated ones involving the notion of meaning. But in a perfect language in which each thing had its own one name, that in the sense of a sentence a certain object occurred, would be also shown visibly by the occurrence in the sentence of the name of that object; and this might be expected to happen with regard to all internal properties of senses; that one sense, for example, is contained in another (*i.e.*, one proposition follows from

another) might always appear visibly in the sentences expressing them. (This is nearly achieved in Mr. Wittgenstein's T notation.) Thus in a perfect language all sentences or thoughts would be perfectly clear. To give a general definition of "clear" we must replace "visible property of the sentence" by "internal property of the propositional sign," which we interpret analogously to "internal property of the proposition" as a property which a token must have if it is to be that sign, which, if the token is written, is the same as a visible property. We say then that a propositional sign is clear in so far as the internal properties of its sense are shown not only by internal properties of the proposition but also by internal properties of the propositional sign.

(It may perhaps be confusion between the internal properties of the proposition and those of the propositional sign which gives rise to the idea that Mr. Wittgenstein's doctrines are, in general, only asserted of a perfect language.)

We can easily interpret this idea of philosophy in terms of the non-mystical account of internal properties given above. First we notice and explain the fact that we often apparently do or do not recognise that something has an internal property, although this is a pseudo-proposition and so cannot be recognised. What we really recognise is that "the object or sense meant or asserted by the words before us has this property," which is significant because we have substituted a description for a name. Thus as the result of logical proof we recognise, not that p is a tautology which is a pseudo-proposition, but that " p " says nothing. To make propositions clear is to facilitate the recognition of their logical properties by expressing them in language such that these properties are associated with visible properties of the sentence.

But I think this activity will result in philosophical propositions whenever we discover anything new about the logical form of the senses of any interesting body of sentences, such as those expressing the facts of perception and thought. We must agree with Mr. Wittgenstein that " p is of such and such a form" is nonsense, but " p " has a sense of such and such a form" may nevertheless not be nonsense. Whether it is or not depends on the analysis of " p " is significant," which seems to me probably a disjunctive proposition, whose alternatives arise partly from the different possible forms of the sense of " p ". If this is so, we can by excluding some of these alternatives make a proposition as to the form of the sense of " p ". And this in certain cases, such as when " p " is "He thinks q " or "He sees a ," could be appropriately called a philosophical proposition. Nor would this be incompatible with Mr. Wittgenstein's more moderate assertion that "Most propositions and questions, that have been written about philosophical matters, are not false but senseless. We cannot therefore answer questions of this sort at all but only state their senselessness. Most questions and propositions of the philosophers result from the fact that we do not understand the logic of our language" (4.003).

Lastly I wish to touch on Mr. Wittgenstein's general view of the world. "The world," he says, "is the totality of facts not of things" (1.1) and "it is clear that however different from the real one an imagined world may be, it must have something—a form—in common with the real world. This fixed form consists of the objects" (2.022, 2.023). It is an unusual view that any imaginable world must contain all the objects of the real one; but it seems to follow from his principles, for if "*a* exists" is nonsense, we cannot imagine that it does not exist, but only that it does or does not have some property.

Mr. Russell in his introduction finds an acute difficulty in the fact that $(x) \cdot \phi x$ involves the totality of values of ϕx and so, apparently, that of the values of x , which according to Mr. Wittgenstein cannot be spoken of; for it is one of his fundamental theses "that it is impossible to say anything about the world as a whole, and that whatever can be said has to be about bounded portions of the world". It seems doubtful, however, whether this is a fair expression of Mr. Wittgenstein's view; for one thing, it suggests that it is impossible to say $(x) \cdot \phi x$, but only perhaps "All *S* are *P*," taken as asserting nothing about the non-*S*'s, which he certainly does not maintain. It may, then, be interesting to consider what he says which gives plausibility to Mr. Russell's interpretation. He does undoubtedly deny that we can speak of the number of all objects (4.1272). But this is not because all objects form an illegitimate totality, but because "object" is a pseudo-concept expressed not by a function but by the variable x . (Incidentally I do not see why the number of all objects should not be defined as the sum of the number of things having any specified property and the number of things not having that property.) Also he says that "The feeling of the world as a limited whole is the mystical feeling" (6.45). But I do not think we can follow Mr. Russell in deducing from this that the totality of values of ϕx is mystical, if only because "the world is the totality of facts not of things" (1.1). And I think that "limited" gives the key to the sentence quoted above. The mystical feeling is the feeling that the world is not everything, that there is something outside it, its "sense" or "meaning".

It must not be thought that the topics I have discussed nearly exhaust the interest of the book; Mr. Wittgenstein makes remarks, always interesting, sometimes extremely penetrating, on many other subjects, such as the Theory of Types, Ancestral Relations, Probability, the Philosophy of Physics and Ethics.

F. P. RAMSEY.

A Study of Kant. By JAMES WARD. Cambridge: University Press, 1922. Pp. vii, 206.

Immanuel Kant (1724-1804). Hertz Philosophical Lecture, 29th November, 1922. By JAMES WARD. Published for the British Academy. London: Humphrey Milford. Pp. 22.

DR. WARD'S Hertz lecture serves as an admirable introduction to his *Study of Kant*. It is devoted to a statement of the general thesis which the volume expounds in detail. Briefly stated, that thesis is as follows: Kant was "the first effectively to enounce as the supreme principle in the development of all knowledge, the activity of the experient subject itself" (p. 12). Such activity is present both at the lower level of mere perception, and also at the higher, self-conscious level. This distinction appears in the *Critique* as the distinction between empirical and transcendental apperception, the former referring to subjective or individual experience which varies from one experient to another, and the latter to the objective or universal experience which is the same for all. The former type of experience can exist without the latter, but not the latter without the former. Owing to the want of historical sense, characteristic of his time, Kant never raised the question how the higher level of experience has been attained: otherwise Kant "might have seen that transcendental apperception is bound up with transsubjective intercourse, and again that in this discourse of mind with mind, 'winged words' were the medium, so that at length λόγος came metonymically to mean that pure reason which Kant was essaying to criticise as the basis of experience" (p. 14). With this limitation, Kant's answer is in its main character clear and unambiguous, namely, that we have universal, *a priori*, knowledge only of what we have ourselves put into what is known. The answer, that is to say, is propounded in terms of "transcendental idealism," and justifies only what Kant entitles "immanent metaphysics".

Upon this we have Dr. Ward's comment: "It will be thought, I fear, somewhat rash to say so, but I must confess that to me an immanent metaphysics limited to the projection on the Object of attributes pertaining to the Subject—more exactly, the interpretation of the World in terms of the Self—is just anthropomorphism. Yet what other construction can we put on Kant's Copernican hypothesis? Moreover, Kant himself, more or less unconsciously, furnishes ample justification [in contradiction of his professed derivation of them from the table of judgments] for deriving the real categories from what the Subject knows of itself at the social or self-conscious level" (pp. 14-15). Kant's treatment of the Ideas of Reason in the first *Critique*, of freedom and of the moral postulates in the second *Critique*, and of subjective purposiveness (beauty) and objective purposiveness (the organic) in the third *Critique*, are cited by Dr. Ward as further illustrating the essentially anthropomorphic character of Critical teaching.

This thesis accounts for the somewhat unusual order of topics in the *Study of Kant*. The contents fall into two main divisions. After a quite brief account of Kant's personality and nurture (pp. 1-6), and a more lengthy treatment of his main writings during the pre-Critical period (pp. 6-41), the central teaching of the *Critique*, especially as given in Kant's deduction of the categories, is expounded and discussed in preliminary fashion (pp. 41-94). Then follow statement and criticism of Kant's positions in the *Critique of Judgment* (pp. 94-131). (*The Critique of Practical Reason* is treated only incidentally, in connexion with the problems raised in the other *Critiques*.) This division of the volume closes with a summary of the results so far reached (pp. 132-139). In what I may call the second part, Dr. Ward returns upon his steps, and proceeds to examine in greater detail Kant's views in regard to the nature of the self, especially as shown, first in his doctrine of inner sense in the *Æsthetic*, in the *Analytic*, and in the *Paralogisms* respectively, and secondly, in his doctrine of freedom and in the dualism, implied therein, between theoretical and practical Reason (pp. 139-189). The volume concludes with a brief account of Kant's *Religion within the Limits of Pure Reason* (pp. 189-202).

Dr. Ward's reasons for the above arrangement connect, as I have said, with his interpretation of the Critical philosophy as being essentially anthropomorphic. The first part of the volume gives the evidence in support of this interpretation of Kant's teaching; while the second part treats of the foundation upon which such teaching can alone be made to rest, namely, the self as disclosed in experience.

Since Dr. Ward, in this small volume, covers so extensive a field, his argument, I need hardly say, is very close-packed, and touches upon so many different problems, that it is by no means easy, without entering into undue detail, either to make comment, or to pass criticisms that are not merely external. I shall endeavour to strike a middle course by confining my attention to Dr. Ward's main thesis. But first I must state it in somewhat greater detail, and shall do so as far as possible in Dr. Ward's own words. "Summing up what we find underlying Kant's three *Critiques* and brought to a conclusion in the last: It is our own native spontaneity which leads us to regard the world as made up of living persons—in the widest sense—and of inanimate things. Again it is our own moral character which prompts us to believe in a realm of ends, to which we ourselves—as persons in the stricter sense—belong, and of which the Supreme Head (*Oberhaupt*) is God. Surely all this is anthropomorphic" (p. 132). This, Dr. Ward contends, is no less true of Kant's teaching in regard to the *constitutive* categories. "In the end [Kant] came to see directly in the 'transcendental unity of apperception' the common source of them all. . . . As Kant himself has said: '*I am* is the original of all objects': on these the permanence and activity of the subject are analogically projected. Here then too, though it is not avowed, the

anthropomorphic character of Kant's standpoint is, as I have already urged, unmistakeable" (pp. 133-134).

The reader will, however, seriously misunderstand Dr. Ward, if he takes these statements as amounting to a condemnation of Kant's procedure. On the contrary, properly interpreted, they represent, in Dr. Ward's view, sound and tenable positions. "Anthropomorphism is Kant's own term; but unfortunately it is a term apt to suggest myths and graven images, fictions which at the best only travesty or mask the real truth. To condemn any and every use of it on this ground has seemed to many to be sound criticism: yet it is utterly shallow" (p. 136). Even Locke succumbs to this error, when he avers that "in using [the] term [substance] we still talk like children and remind him of the poor Indian philosopher whom he has immortalised. Kant did far better: he clearly formulated the 'supreme principle of all use of the understanding' which English empiricists with the exception of Berkeley failed to see" (p. 137).

Anthropomorphism is not, however, Dr. Ward states, the best term to bring out the significance of this central principle. A preferable term would have been 'reflexion'—not in the psychological sense in which abstraction is made from the objective factor in experience, but in the sense in which Kant has used the phrase 'transcendental reflexion'. "Here, with all the knowledge we have of both sides, we ponder and review the evolution of the whole. And such is very much what the reflective judgment in the end has turned out to be. . . . *Intelligendo se intelligit omnia alia* has been said of God. It is the same truth relatively valid for us, which underlies all the anthropomorphisms to be found in Kant's *Critiques*, whether avowed or not" (p. 138).

Thus Dr. Ward's disagreements with Kant are not on the ground of his anthropomorphism, but because of Kant's failure to recognise the other main positions to which, in consistency, it ought to have committed him. "Like Moses [Kant] guided others to the promised land in which he believed, but which he never reached himself" (p. 139). For it is no promised land, but "the merest mirage," if the distinction between appearance and reality be applied, as Kant does profess to apply it, also to the self, and if, in consequence, any such teaching as that which is embodied in his doctrine of inner sense, be put forward. For the self, from which the analogies derive all their force, is then interpreted in a manner entirely incompatible with their alleged meaning. "His exposure of the rational psychology of the Wolffians may be sound enough as regards the conclusions reached; but it was not sound in the contention from which it started, *viz.*, that the Idea of the Self is simply a *focus imaginarius*, which reason, unchecked by transcendental idealism, mistakes for a thing *per se*. And he only escaped from the conclusions of a sensationalist psychology like Hume's by unconsciously abandoning the doctrine of inner sense. . . . What he did not see was that 'inner sense' is a misnomer for something

radically different" (p. 171)—namely for the self as experienced in feeling and conation.

In Dr. Ward's view this precisely was Kant's most difficult problem, and that in regard to which his failure is most obvious. "The problem was to hold fast to the *reality* of the self without at the same time repudiating the doctrine of transcendental idealism, i.e., that the self is only 'given' by an inner sense and so as phenomenal. Kant had quite rightly started by regarding the real existence of self as the fundamental fact; but then his doctrine of an inner sense cut the ground from under this ultimate position. No refutation of fallacies supposed to be inherent in 'the very nature of reason' could restore that. Formal errors of reasoning can involve no illusions, for illusions are never formal; and in questions of fact where there is nothing, there can be no illusion. I cannot say I am nothing, whatever may be meant when I say that I am. The problem, in short, is *not* as to *what* this I may be, the existence of which every self-conscious being affirms for itself in saying: I am" (pp. 163-164).

Dr. Ward gives a very searching analysis of Kant's teaching on this central issue. Though by universal admission Kant's doctrine of inner sense is one of the least satisfactory parts of his philosophy, such careful following out of its many implications and consequences casts much light upon the tacit, underlying assumptions which determine so much of Kant's thinking.

The very success of Dr. Ward's criticisms suggest, however, the query, whether Kant can really have intended to give an anthropomorphic explanation of the origin of the constitutive categories, and so have seriously meant to maintain that such categories as substance and causality are formed in view of the abiding and active character of the self and are then ascribed by analogy to other existences. That would mean that they do not condition either consciousness or self-consciousness. It would commit Kant to admission of two levels of experience, a merely empirical level, and a higher and subsequent level on which alone the categories are brought into play. Both of these positions are, of course, positions from which Kant started. They represent assumptions which at the opening of the Critical period, as demonstrated by the *Reflexionen* and other evidence, entirely dominated his thinking. Thus in the Introduction to the *Critique of Pure Reason* he speaks of empirical judgments as not involving any universal or *a priori* element. And even subsequent to the completion of the *Critique* he still in the *Prolegomena* draws a distinction between judgments of perception and judgments of experience—the latter alone involving the use of categories. As Dr. Ward successfully shows, scattered throughout the *Critique* there are many passages to the same effect, and yet others in which the anthropomorphic character of the categories would seem to be inculcated. Must we then agree with Dr. Ward's conclusions? Is the interpretation which he propounds the only interpretation possible, or does it not itself create,

for students of Kant, much more serious difficulties than those with which it enables us to deal? Why, if Kant started from the ordinary view that experience exists on two distinct levels, did he come to advocate, as on certain occasions he undoubtedly does, the direct counterview? Why if, from the start, he held the Leibnizian view that knowledge of the categories can be acquired by reflexion upon the nature of the self, did he so completely fail to show how in particular this comes about, or to consider Hume's objections to such a 'deduction' of them? Why, on the other hand, did he so labour and sweat over his 'objective' deduction of the categories, and over his many attempts (as in the second Analogy) to connect them directly with our consciousness of time? And last, but not least, how came he so misguidedly to undermine his entire position by adopting the doctrine of inner sense? It is owing to such considerations, supported by those parts of the *Critique* which, in proportion as they are late in date of writing, tend to reinforce them, that so many students of Kant, such as Green and Caird, have arrived at an interpretation of Kant's teaching which is almost diametrically opposed to that here presented by Dr. Ward. And that being so, it seems unfortunate that Dr. Ward has not considered this other view, and has not indicated more explicitly his reasons for rejecting it. Instead he has chosen to limit his exposition to what, as regards its main features, may be described as a very fresh and vigorous restatement and further development of that type of interpretation which has been advocated in Germany by Schopenhauer and in this country by Hutchison Stirling.

The alternative interpretation represents Kant as advocating a point of view which can hardly be said to have occurred, even as a possibility, to any of his predecessors. It stands in direct conflict with the many assumptions which he inherited from them and which to the last continued to influence his thinking and modes of expression. This point of view can be stated in several different ways, as involving the assertion either (1) that the immediate and the mediate are not two kinds of knowledge but two elements involved in all knowledge; or (2) that the primary function of the conceptual categories is not to clarify experience but to make it possible, *i.e.*, that universals are necessary for experience, and not merely for its interpretation; or (3) that the categories condition *all* consciousness, and cannot therefore be initially obtained by any kind of *reflective* consciousness; or (4) that the categories are what enable cognition always to take the form of recognition, *i.e.*, that the categories are required to make self-consciousness possible, and cannot therefore be subsequently constructed, by means of it. These, obviously, are extremely difficult theses to maintain; and if true, are bound to be of a very revolutionary character. If, further, they are the theses which Kant was endeavouring to establish, the labours to which he entirely gave himself up during so many of his best years (1772-1780), and the difficulties which, by his own account, he had to overcome in so doing, at once become intelligible.

We shall also be in a position to understand why Kant should not only have been the Father of objective or Hegelian idealism, but also how, precisely in regard to the nature and origin of the categories, he should have exercised a profound influence upon so unqualified an opponent of all anthropomorphism as Mr. S. Alexander (*cf.*, *Space, Time and Deity*, vol. i., pp. 190-192). Indeed may we not say that just because Kant was bent upon upholding the categories on other than anthropomorphic or subjectivist lines, he was not merely willing to recognise, but himself insistent, that the distinction between appearance and reality applies no less rigorously to the experient than to the experienced, and that the self, from the point of view of knowledge, though not of moral action—is not this antithesis (or contradiction) of the very essence of his philosophy?—should be treated as in no more privileged a position than any other known type of existence? We may agree with much in Dr. Ward's very enlightening criticisms of Kant, as when he dwells upon the unfortunate consequences of Kant's individualism, and points out that when Kant talks of epigenesis he thought only of preformation; we may also deplore Kant's untenable method of distinguishing between appearance and reality and the doctrine of inner sense that goes therewith; and we may therefore readily admit that Kant's treatment of the self is one of the least satisfactory parts of his theoretical philosophy. But to ascribe to Kant so Leibnizian a view of the origin of the categories must seem to many of Dr. Ward's readers, unless he succeeds in converting them from all their previous views in regard to the essentials of Critical teaching, a very questionable procedure, and indeed as amounting to a direct attack upon what they have hitherto regarded as perhaps the most far-reaching and fruitful of all Kant's positive contributions. I do not here presume to argue that Dr. Ward is in error, and that it is the other School of interpretation which can alone be approved. Students of Kant are likely to continue to be divided, according as their own philosophical convictions, as to what can possibly be true, determine their outlook; but it is, I think, a legitimate criticism of a work devoted to the exposition of Kant's philosophy, to point out that it fails to deal, in any explicit manner, with one of the two main interpretations which have hitherto prevailed in regard to it. All students of Kant, however, without exception, must be grateful that so great a Master of Philosophy should have turned aside from his own constructive work, to expound, in this most thorough and helpful manner, what he regards as living, and what he regards as but of antiquarian interest, in Kant's writings.

I have not attempted to give an account of Dr. Ward's valuable—to myself the most helpful part of the volume—discussions of Kant's positions in the *Critique of Judgment*, or of the many other incidental discussions. And in conclusion I may point out that, with the sole exception of Caird's massive volumes, this is the only English work which gives a general account of Kant's philo-

sophical writings, both pre-Critical and Critical, on all their many sides.

NORMAN KEMP SMITH.

Emergent Evolution (Gifford Lectures, 1922). By C. LLOYD MORGAN, D.Sc., LL.D., F.R.S. London: Williams & Norgate, 1923. Pp. xii, 313.

A CASUAL inspection of this book would convey the impression that the University of St. Andrews had received short measure from her latest Gifford Lecturer. There is nothing in the preface or title page to correct this impression. It is only on reaching p. 62 that we are referred quite casually to "my second course of lectures where certain matters will be explained more fully". From this and other hints it is possible to infer that the second course of lectures will really be a continuation of the first. There seems to be no good reason for the author to conceal the fact that this book is really only a first volume and that the second volume is likely to appear another year.

This book is Prof. Lloyd Morgan's confession of faith, or at any rate the first half of it. Though usually the theologian tells us that we are damned if we differ from him, the philosopher that we are feeble-minded, the politician that we are mercenary knaves, here is one writer who admits that reasonable men are not necessarily all of one opinion, that systems of metaphysics are merely hypotheses and that even Gifford Lecturers may be mistaken. One cannot be too grateful for such high courtesy and honest dealing.

If the term were not considered slightly insulting, one might call Prof. Lloyd Morgan an eclectic philosopher, for he has obviously drawn his ideas from many sources. But to call him eclectic without qualification would be to obscure the fact that his system is a unity and has a distinct individual flavour. His starting point is naturalistic and evolutionary, in a word Huxleian. But the leaven of Alexander, not to mention the other kinds, has been working in the Huxleian meal. The view of the universe that he sketches for us is in general outline that of Prof. Alexander. The universe is a hierarchy, at the bottom of which is the material world extended in Space and Time, at the apex is God, at successive intermediate levels we find living, conscious, and intelligent organisms. Events and systems at any one level involve events and systems at a lower level, but to pass from a lower to a higher level necessitates the "emergence" of a new element not present at the lower level. Emergence does not imply any gap or break in the order of nature but simply that a knowledge of events at the lower level does not of itself tell us anything about the emergent events. Very wisely the author does not rely only on the doubtful and fragmentary information we possess about living and conscious beings to defend his thesis, but draws arguments from the better understood facts at the level of purely material systems; from Physics

in fact as well as Biology. Observation of gaseous systems leads to the formulation of the laws of gases, but no amount of observation of gases will tell us that liquids and crystals can be produced from them by lowering the temperature, or what are the properties of liquids and crystals. Relatively to gases liquid systems are emergents, and crystalline systems relatively to liquids. We can acknowledge this without postulating any breach in the order of nature. Further, once the process of transition from one state to the other has been observed a law of the process can be formulated, though not before. The treatment of emergence neatly avoids the weary controversy of Vitalists and Mechanists.

Mind in Prof. Lloyd Morgan's scheme is not only an emergent factor in the world, but is also, under another aspect, a correlate of material events at every level in the hierarchy. The difficulties of combining this Spinozan view of mind with the other and more ordinary one are acknowledged but hardly overcome. A similar complication appears in the treatment of Deity as having a double aspect or function. God is conceived as the activity that operates at all levels and as responsible for there being a process of emergence from lower to higher, but also as an emergent character. Difficulties of this kind are not, of course, unknown to the theologians and are not peculiar to Prof. Lloyd Morgan's Philosophy.

The treatment of sense perception is interesting and somewhat peculiar. Prof. Lloyd Morgan will have nothing to do with the form of Realism that attributes every quality of experience to the external world nor on the other hand with the Idealism that attributes everything to the percipient mind. He has the hardihood to take up an intermediate position not very different from that of Locke. He has of course a more elaborate apparatus of knowledge—physical, physiological, and psychological—with which to expound his views, but the fundamental point is the same, that the "primary" qualities are intrinsic in what is experienced, the secondary qualities are the work of the percipient's body and mind. This is a difficult attitude to maintain at the present day. It is quite true as the author points out, that Naïve Realism will not do; it only shirks the problems that every philosopher ought to try to solve. It is also true that professed Realists are not free of difficulties of the very same kind. A diehard Realist, such as, with all due respect, we may call Prof. Laird, avoids the difficulties by considering every kind of perceptible quality to be intrinsic to the object, even the property of beauty. But more tender minded Realists, such as Prof. Alexander, stop short of this. It is no easier to explain why colour should be treated as intrinsic to an object and beauty not, than to explain why extension should be intrinsic and colour not. Unless we are diehards of either camp, Realist or Idealist, we tend to draw the distinction quite arbitrarily somewhere and have little right to quarrel with those who draw it equally arbitrarily in a different place.

Most thinkers who have discussed the problems of sense perception have avoided a difficulty which Prof. Lloyd Morgan ex-

explicitly introduces. They have usually postulated the existence of a percipient and a world for his perception as though there was no further question involved. This attitude is of course convenient up to a point, but does not satisfy an evolutionist, for whom a percipient organism is the outcome of a special process and is incomprehensible apart from an understanding of the process. It has to be confessed that the adoption of the evolutionary standpoint complicates rather than simplifies the whole problem, though that is not a sufficient reason for abandoning it. In appearance at least, Prof. Lloyd Morgan has not altogether avoided, what may be called the physiologist's fallacy. That is to say the fallacy of mixing up bodily processes in sense organs and nerves, which only an external observer could be directly aware of, with the mental processes which only the percipient himself is directly aware of. The confusions in ordinary speech make the distinction extremely difficult to maintain and the medical profession have made matters even worse by always saying "mental" when they mean "nervous" and "nervous" when they mean "mental".

In addition to the topics already mentioned, Prof. Lloyd Morgan discusses the psychological question of mental reference, particularly whether there can be sense-awareness without any reference beyond the immediate context, also the problem of memory and gets involved in the hopeless task of making intelligible M. Bergson's theory of images. In obedience to the dictates of philosophical fashion he discusses Relativity, and lastly, a more important topic from his point of view, the question of causation. It is not always easy to see the reason for the selection of the various matters discussed or the connexion between them. Doubtless this will be made clearer, when the sequel is published in due course and Prof. Lloyd Morgan's views can be considered as a whole.

A. D. RITCHIE.

The Contact Between Minds: A Metaphysical Hypothesis. By C. DELISLE BURNS. London: Macmillan & Co., Ltd., 1923. Pp. vii, 138. Price 7s. 6d. net.

MR. BURNS' problem, as his title shows, is not merely that of knowledge of other minds, although this is his central preoccupation. The most fundamental type of contact is not that of knowledge, but that of co-operation in activity; and again, there is a contact between minds in the sphere of feeling which is not less important. The problem of knowledge of minds then falls within the wider problem of their contact.

The discussion is metaphysical and not psychological, in the sense at least that it is concerned primarily with the principles and concepts by means of which the experiences relevant to the problem are to be understood. It is a metaphysical discussion of a special problem. In such a discussion, as Mr. Burns himself points out, a general metaphysics is implied, of which some hints are clear especially in the last chapter.

I.

The problem of the knowledge of other minds, as ordinarily put, is this. On the one hand, we are sure that other minds exist, and we feel that there must be some basis in experience for this sureness. But, on the other hand, when we seek for this basis, we find: (i) we cannot observe other mind directly as an object among other objects; (ii) we cannot infer mind from observation of bodies; (iii) supposing we can become aware of our own mind, yet our awareness of our own mind will not help us to make inferences about other minds, even with the help of observations of other bodies.

Now these difficulties owe their force to certain assumptions about awareness; and the problem can only be settled by an examination of these assumptions.

There is firstly, a general assumption that if you cannot become aware of other mind as an object, you cannot become aware of it at all.

There is secondly, an assumption that body is distinct from mind, so that bodies have only bodily activities, which we can become aware of without being aware of mind.

There is a third assumption which allows that you can become aware of your own mind without making it an object, but which supposes that you can become aware of your own mind as yours—as your personal self—without being aware of other mind.

All these assumptions Mr. Burns calls in question; and he asks, what will be the result of supposing (a) that there is an awareness of mind or mental process which does not make mental process an object (such awareness he speaks of as enjoyment), (b) that mental process is a bodily activity of a special sort, (c) that enjoyment—the awareness of mental process—is not fundamentally or originally personal.

(a) Is clearly necessary if the problem is to be solved at all, once the admission is made that mind cannot be observed as an object; (b) enables Mr. Burns to avoid the isolation of mind from mind; (c) makes it possible to derive personal mind from an enjoyment which has not yet broken out into personalities.

This is his "metaphysical hypothesis," which he discusses both directly, by showing how it fits the facts of the situation, and in its consequences, in relation to the nature of society and to the problem of value.

II.

In this problem of the awareness of mind, there are two difficulties which together form a dilemma for all who wish to avoid making mind an object, and yet wish to justify awareness of mind.

The first difficulty is this. If enjoyment of mental process is itself a mental process distinct in existence from the mental process enjoyed, then enjoyed mental process becomes after all an object; and again, the problem arises of how the enjoying mental process is itself known.

But if, on the other hand, the enjoyment is not distinct in existence from the mental process enjoyed, the second difficulty arises. For it is then impossible for *me* to enjoy *your* mental process except in so far as your mental process is identical in existence with mine. In other words, I could never be aware of your mental process as an existence distinct from mine.

Mr. Burns endeavours to avoid both alternatives by conceiving enjoyment as "the *givenness* of mental process," and by distinguishing between the *existence* of a process and its *givenness*. Two processes could then be distinct in existence, while yet their givenness (which is not an existence separate from the processes) could be identical.

But both alternatives seem to be continually pressing on him for acceptance throughout his book. His fundamental conception of enjoyment is, as I have said, that of awareness of mental process which is neither mine nor yours—which is not personal at all—but *ours*: joint enjoyment. But the phrase "awareness of mental process which is neither mine nor yours" is ambiguous. (1) It may mean, "awareness of—*mental process which is neither mine nor yours*" ; in which case joint enjoyment means joint mental process, and the first difficulty can then be avoided by Mr. Burns' conception of enjoyment as the reverse relation of contemplation. But the second difficulty is then accepted: and this leads Mr. Burns at times to admit that strictly speaking "I" cannot ever become aware of "your" mind, but only of "our" mind. (2) But the phrase may mean "*awareness which is neither mine nor yours*—of mental process which is yours and not mine"; and this meaning is needed, if Mr. Burns is to solve his problem of showing how, out of joint enjoyment, awareness of other minds can arise. But this at once throws him back on the first difficulty.

III.

Indeed it is the first difficulty on which I would lay stress. It comes up in practical form when one endeavours to deal in detail with the development of our knowledge of other minds. Mr. Burns has to distinguish between my awareness that you have a mind, and my awareness of what your mind is in detail. Only the former is given in "contact," *i.e.*, in joint enjoyment, and is direct: the latter is a matter of gradual discovery, through inference, partly guided by my contemplation of your body. But apart from the difficulty of passing in the first instance from "awareness that *we* have a mind" (which is, strictly speaking, what joint enjoyment gives) to "awareness that *you* have a mind," there is a further difficulty. Of what nature is my inferential awareness of your mind in detail? If it is contemplation, then the whole problem vanishes in the admission that mind can after all be made an object.¹ But if

¹ Mr. Burns seems to admit that *past* mental process can be made an object and contemplated, but seems to regard it as impossible for present mental process.

it is not contemplation, then it is enjoyment. But an enjoyment that is inferential and may be erroneous, that is guided aright or astray by contemplation, comes to be extremely like contemplation.

Indeed I should question whether the direct enjoyment "that *you* have a mind" can be regarded as giving positive certainty. When you and I are pulling on the same rope, there is enjoyment which is different from the enjoyment experienced when I alone am pulling on the rope. It is "our" enjoyment. But how can "I" be sure that there is a "you"? I agree that, *unless* there is experience of "our" enjoyment, there is no justification for any supposition that there is a "you". But this negative condition cannot be turned straightway into a positive. When Achilles was fighting against the river god Scamander, I have no doubt that he experienced "contact"—"joint enjoyment"; but the attribution to the god of a mind depends for its warrant—and this is the general principle in the case here—on the further question whether you can continue this attribution in detail. Unless this initial attribution is the starting-point for a further successful attribution of such and such a mind in detail, it must be thrown over. The beginning depends for its success on successful continuance. But this seems to prove the beginning to be itself provisional, hypothetical, inferential: in short, no matter of primitive certainty.

All this tends to break down the distinction between enjoyment and contemplation, and to give to enjoyment all the characters of contemplation, one by one.

When then Mr. Burns suggests that the proper supposition to start from in psychology is not "I—it," but "mental process—it," mental process being understood as "our mental process," and that the next stage in the process is an awareness of "your enjoyment" in connexion with "your" body, and that only later, as an advance is made in the exploration of objects and of persons, arises an awareness of "my enjoyment," I should agree in the main; but I should suggest that this account, if pursued, would go far to break down the antithesis between contemplation and enjoyment on which his book rests (involving indeed a reconsideration of the nature of contemplation): for *what* I enjoy (as Mr. Burns himself shows) stands as much in need of systematisation and explication as what I contemplate, forms indeed part of the same system as what I contemplate, and the systematisation of the part depends on its success throughout the whole.

On the excellence of this book, both in its acuteness and its richness of material, I have no space to dwell; but special mention ought to be made of the extremely suggestive chapters on "Minds and Bodies," on "Ultimate Values" and on "Social Unities". It is a book which no student of the subject could read without continual profit. It repays careful study and is worth reading many times. It should go far to enhance Mr. Burns' already high reputation.

LEONARD RUSSELL.

VII.—NEW BOOKS.

Franz Brentano: Zur Kenntnis seines Lebens und seiner Lehre. By
OSKAR KRAUS. Mit Beiträgen von CARL STUMPF und EDMUND
HUSSERL. München: Beck, 1919. Pp. x, 171.

Brentano died in March, 1917, in his eightieth year. His activity as a University teacher came to an end in 1895, and the rest of his life was spent in retirement in Italy and Switzerland. He left behind him numerous manuscripts and lecture-notes, which those who have examined them assert to be of great importance and value; and it is intended some day to bring out a collected edition of his scientific Remains. But, unfortunately, the condition of affairs in Germany and Austria since the armistice has hitherto prevented the carrying out of the project, much to the detriment of those branches of philosophical inquiry in which Brentano was an extraordinarily acute and original investigator. I would venture to suggest that in no way could English philosophers more effectively help the furtherance of philosophical research in Germany at the present time than by coming to the assistance of an undertaking which all who have the interests of philosophical science at heart must desire to see fulfilled. Meanwhile, this account by Prof. Kraus of Brentano's life and philosophy, to which are added contributions from Stumpf and Husserl (two of Brentano's most distinguished pupils), will be the more acceptable because it indicates to some extent the nature of the material that awaits publication.

During the years which elapsed between the date of the appearance of his larger books and that of his death, Brentano's views underwent considerable modification. Certain of these changes have become known through the publication in 1911 of a small treatise on the classification of psychical phenomena, which was a new and much enlarged edition of the corresponding chapter in the *Psychologie vom empirischen Standpunkte* (issued in 1874); and in which was included an Appendix dealing with a number of points of special significance for the further development of his psychological and epistemological theories. Also in Anton Marty's *Gesammelte Schriften* (two volumes of which were printed during the war) much information is given concerning the logical doctrines. Marty, who died in 1914, was one of Brentano's most devoted and trusted pupils, and had kept in close touch with his teacher from the time of his student-days in Würzburg. Once more, in an Introduction to the second volume of Marty's writings, Prof. Kastil has described in an interesting manner the way in which Brentano worked out his conception of the import of propositions. These adumbrations of what we are to expect intensify the hope that before the time of the publication of the promised volumes, we may not, as Mill once said of Martineau's lectures, be studying their contents in another state of existence.

A noteworthy feature of Brentano's later work is, Prof. Kraus tells us, his contention that we can have nothing else than real things as objects of cognitive apprehension. He discarded, that is to say, his earlier view

that there could be presentations of non-real objects. He argued apparently as follows: The notion of 'presentation' is an unambiguous notion. It involves that in presentation something is presented. If, however, this 'something' were not itself unambiguous, neither could the term 'presentation' be. Consequently, it is impossible that, under the designation 'Etwas,' now a real thing and now a non-real entity is to be understood, for there is no notion applicable in common to the real and the non-real. Formerly, he had maintained that the non-real entity which could be presented was what he called an 'immanent object,' although he had all along recognised that to this immanent object, as object, existence could not be attributed. But, later, he refused to admit that either objects or 'contents' (*Inhalte*) could be 'immanent' in mental acts of thinking; and held that those writers who spoke of 'contents,' 'Objectives,' 'Sachverhalte,' etc., as not merely 'immanent' but as really subsisting entities were occupying themselves with fictions. In close connexion with his change of view in this respect was his change of view in respect to immediate apprehension. He came, namely, to the conclusion that in none of our intuitions (*Anschauungen*), neither in outer nor in inner perception, are we ever immediately aware of anything that is not universal in character. Intuitions might, in fact, be described as presentations of the least degree of generality. Generality pertains, he argued, not in the first instance to concepts obtained by abstraction from intuitions but to intuitions themselves. Especially was this true of inner perception. If we perceive our substantive being in its individual particularity, how comes it, he asked, that the conflict between materialism and spiritualism has continued so long undecided? No doubt we do perceive our *thinking activity* as incorporeal, but the *subject that thinks* is only apprehended by us in a highly general way. If we do not perceive ourselves as corporeal, neither can we be immediately assured through inner experience that the subject underlying our psychical life is spiritual. We perceive ourselves as thinking things; but the thinking thing which we perceive might, for aught we could thus determine, be something corporeally extended, to which thinking belongs as an attribute, just as redness belongs to a surface over which it is spread uniformly. What individualises the thinking thing is not perceived; what we perceive when we perceive our thinking activity is exactly what anyone else perceives in like circumstances. In truth, it is this universal character of our inner perception that gives from the outset to psychology its character of being a general science. How, then, can we know that in the awareness of self it is with one individual and not with several individuals we have to do? Briefly, Brentano's reply was that only *one* can be identical with the percipient; and, of 'matters of fact' or empirical truths, only what is identical with the percipient can be grasped by him with self-evident certainty. It is true that my psychical activities are not known by me as mine with absolute necessity; but were the psychical activity which I perceive at this moment not even relatively to me necessarily mine, could—in other words—the thinking be there while that which is thought is not, the ground would be cut from under self-evident knowledge altogether.

The notion of substance, Brentano held, is an empirical notion, the notion of an ultimate subject, as it is offered in inner and outer experience. Substance, he would define, as that which has no further subject. The determinations which belong intrinsically to substance are, as he put it, those without which substance could not be. It is certain, he maintained, that there can be no corporeal substance without extension, localisation, and form, and that, therefore, these spatial determinations, to which the temporal have to be added, are intrinsic

determinations of corporeal substance. On the other hand, the secondary qualities are contingent determinations (*Akzidentien*); and in the real corporeal world the physical and chemical characteristics all fall under this latter head. Amongst his manuscripts there is an article on the Lorenz-Einstein problem, in which he refers to the assistance which can be obtained from the consideration that in physics and chemistry we are concerned merely with the relations and transformations of these accidents of substance. Lord Kelvin conceived of atoms as vortex movements in a perfect fluid. And so Brentano would conceive of all ponderable matter, atoms, and electrons, as Modes (*Akzidentien*) of a unitary, immovable substance, which is to take the place of the ether. These Modes or characteristics, which can be thought of as divided up into infinitesimal parcels, would be what physicists had hitherto regarded as material substances, whereas they would now appear to be properties of a fundamental substance—properties transferable from one place to another, and probably depending upon other properties unknown to us. Physical laws and the laws of pure mechanics would hold of these components and their transformations alone; the single substance would not be subject to them. Light waves or electric waves would, then, likewise fall to be regarded as Modes, which propagated themselves from one part of substance to another, and the same would be the case with other waves, such as might account for gravitation.

I have referred to but a few of the topics handled in these unpublished writings. There is a long and careful treatment of the nature of space and time, and of the conditions involved in the perception of spatial and temporal relations; there is an elaborately worked out theory of categories, in the course of which the Kantian system is strenuously criticised and an attempt is made to base the law of causality upon the law of contradiction; there is a discussion of mathematical axioms, and of *Wertaxiomatik*, in which the line of thought sketched in the lecture *Vom Ursprung sittlicher Erkenntnis* (1889) is developed in detail. And, in addition, there is a considerable amount of material concerned with metaphysics and problems of religious philosophy.

The impression left upon the mind by the gracefully written *Erinnerungen* of Stumpf and Husserl is that of a wonderfully strong and fascinating personality. Brentano was, one might almost say, born to be a speculative thinker; and his researches were, from first to last, carried out under the firm conviction that philosophy afforded a field for earnest intellectual labour, the problems of which could be and must be handled in a genuinely scientific spirit. As a teacher, he exerted upon those who had the good fortune to study under him an influence that was well-nigh unique. And from these *Erinnerungen* it is clear that in the tempestuous period of his career which terminated in his secession from the Roman Catholic Church in 1873 he acted from the purest motives; and that the ungenerous things which were said of him at the time had not the slightest foundation. "The picture of the man stands before me," writes Stumpf, "as that of one whom, in the words of Aristotle, 'the bad have not even the right to praise'."

G. DAWES HICKS.

Psychological Types, or The Psychology of Individuation. By C. J. JUNG.
Translated by H. GODWIN BAYNES, M.B., B.C. London: Kegan
Paul, Trench, Trubner & Co., Ltd., 1923. Pp. xxii, 654.

Psychological Types is described by its translator as Jung's crowning work, "a mature and conscious survey of the psychological field, viewed by a mind of unique range and development". It is certainly a very

remarkable and brilliant essay, the fruit, we are told, of twenty years practical psychology. It is a study of Personality, or rather of Individuality (as the sub-title suggests), and illustrates the recognised difference between Jung's and Freud's theories, that the former looks upon the human mind as essentially creative, and its processes as synthetic, while to Freud man is a complex of mechanisms, more or less adjusted to each other by accident or chance. At the end of the work Jung gives a chapter of Definitions (pp. 518-617), which will be of the greatest value to students of Psychoanalysis. In it he describes Individuation as "the process of forming and specialising the individual nature; in particular, it is the development of the psychological individual as a differentiated being from the general, collective psychology". Individuation is the enrichment, the expanding of the conscious life, its emergence out of the identity or sameness of the group (p. 561). The "types" are characteristic, sample or model ways in which the individuation-process occurs.

Jung's distinction between the Introvert and the Extravert types is here given new support from the history of thought, and is modified by the introduction of four more special types, the "function types," each of which may appear in the introvert or in the extravert form. Thus we have eight typical human characters, of which the 10th chapter (pp. 412-517) gives a "General Description". The function-types rest on the four basal functions of the mind,—thinking, feeling, sensation, and intuition. In earlier papers Jung had identified the thinking type with the introvert, and the feeling type with the extravert, but he now regards the two classifications as quite distinct. He admits frankly that he has no *a priori* ground for regarding just these four functions as basal or primordial; it is simply an experienced fact, that not one of them is either necessarily related to, or reducible to, any of the others. Readers of the earlier works of Jung will be interested in the account of *Phantasy* that is given in this volume. It is described as a peculiar form of activity which shows itself in all the four functions, i.e., there is a phantasy-thinking, a phantasy-feeling, etc. The phantasy-image is largely a formation of the unconscious; hence its archaic, and occasionally hallucinatory, character; it is most archaic when "the image is in striking unison with familiar mythological motives. In this case it expresses material primarily derived from the collective unconscious, while at the same time it indicates that the momentary conscious situation is influenced not so much from the side of the personal as from the collective". The primordial image is a deposit of the race-spirit, "it has arisen through a condensation of innumerable similar processes, a precipitate or deposit, and therefore a typical basic form of a certain ever-recurring psychic experience" (p. 556). The primordial image is "the psychic expression of an anatomically and physiologically determined disposition"—"a recapitulatory expression of the living process"; it is the preliminary stage of the idea, or of certain kinds of idea, their material and soil. The ideas derived from such images are distinguished from other concepts by the fact that they are not given by experience, but are inferred as underlying all experience. The idea possesses this quality from the primordial image, which "as the expression of a specific cerebral structure also imparts a definite form to every experience" (p. 558). The primordial image is "an inherited organisation of psychic energy, a rooted system"—"it is, therefore, a necessary counterpart of *instinct* which is an appropriate form of action also presupposing a grasp of the momentary situation that is both purposeful and suitable". "According to my view, all these psychic processes over whose energies the conscious has no disposal come within the concept of *instinct*". It is impossible not to see in all this a close resemblance to the form of Kantianism made popular by Helmholtz and

others. It is true that Jung gives a far wider meaning to the instinctive or unconscious element. He compares the primordial images and their ideas to Kant's archetypes. "Since, however, the idea is merely the formulated meaning of a primordial image in which it was already *symbolically* represented, the essence of the idea is not merely derived, or produced, but, considered psychologically, it has an *a priori* existence as a given possibility of thought connections in general" (p. 548).

The earlier part of the work consists of a vivid historical study of types, and of the theories concerning them. Already in the Gnostic Philosophy Jung finds his *thinking, feeling, and sensation types* recognised; a penetrating analysis of Tertullian and Origen reveals the typical introvert and extravert attitudes to religion; Ebionites and Docetists, Monophysites and Dyophysites, Erigena and Radbertus, Nominalists and Realists, —the duality of nature in the thinkers, it is argued, has determined the phases of these perennial controversies about God, the soul and the world, down to the dispute of Luther and Zwingli on the Holy Communion. The second chapter is a discussion of Schiller's ideas upon the Type Problem, as given in his Letters on the *Æsthetic Education of Man*, and in the Essays on Naïve and Sentimental Poetry; it gives an opportunity for treating of the Classicist and Romanticist, the Idealist and the Realist types of mind. There is also a chapter on the Apollonian and the Dionysian in art (Nietzsche, Wagner), and another on the problem of types in Poetry (Carl Spitteler's Prometheus and Epimetheus). Chapter IV. is on the "Type Problem in the discernment of Human Character," and is a criticism of the types of Furneaux Jordan's "Character as seen in Body and Parentage," to which the attention of Jung had been called by Dr. Constance Long. Jordan's two main types, the active and 'less passionate' on the one side, the reflective and 'more impassioned' on the other, are shown to refer in the main to extravert and introvert, but, as frequently happens throughout this book, the earlier conception is deepened by Jung's practical insight. For instance, the interplay of conscious and unconscious is described: "We have already seen that the 'reflective' and contemplative nature of the introvert finds compensation in an unconscious, archaic life with regard to instinct and sensation. We might even say that that is why he is introverted, since he has to rise above an archaic, impulsive, passionate nature to the safer heights of abstraction, in order to dominate his insubordinate and turbulent affects." "Conversely, we might say of the extravert that his less deeply rooted emotional life is more readily adapted to differentiation and domestication than his unconscious archaic thought and feeling. Hence he is always the one who seeks life and experience as busily and abundantly as possible, that he may never come to himself and confront his evil thoughts and feelings" (p. 187).

Chapter VI., "The Type Problem in Psychiatry" is mainly on Gross' *Die Cerebrale Sekundärfunktion* (1902), and *Psychopathologische Minderwertigkeit* (1909), and Chapter VII., "The Problem of Typical Attitudes in *Æsthetics*," on Worringer's *Abstraktion und Einfühlung*, 1911 (3rd edit.). For the Type Problem in Modern Philosophy (Chap. VIII.) William James' "tough" and "tender-minded" give the text, and for the Type Problem in Biography, Ostwald's Classic and Romantic Types in "*Grosse Männer*" (1911).

The work is an impressive and convincing delineation of human character, in all relations of thought and life; it is Jung at his best, the scholar, the philosopher, and the practical physician; generous in his appreciation of the work of others, and full of promise for the personalities, the types of humanity whom he describes. Dr. Jung has also been fortunate in his translator.

J. L. M.

An Outline of Psychology. By WILLIAM McDUGALL, F.R.S. London: Methuen & Co., 1923. Pp. xvi, 456. 12s.

Prof. McDougall's new *Psychology*, of which the American edition, published by Scribner's, has much narrower margins and more of the ugly air of a textbook, is notable in two important respects. In the first place, it begins with a frank confession that it is no longer possible to write a textbook of Psychology in one volume, which is the best possible testimony to the growing mass of psychological knowledge. Prof. McDougall therefore promises to follow up this book with a second, which will deal with the fascinating but perilous problems of Abnormal Psychology, and also, it would seem, with the more philosophical questions concerning the methods of Psychology and its relations to other sciences, as well as with the mind and body problem in detail (p. 450). Secondly, the book is an open and courageous challenge to the vogue of mechanistic and atomistic (or 'mosaic') interpretations in Psychology, and a systematic exposition of the facts in terms of purpose and purposive functioning. Running as it does sharply, and almost contemptuously, counter to the prevalent fashions, especially in America, of 'behaviourism,' and of the denial of 'consciousness,' it is sure to produce a great hubbub; it will be fiercely attacked, and denounced as 'reactionary' and 'obscurantist'. But even those who most dislike it will hardly dare to call it 'unscientific,' as they would do if any one but an F.R.S. and Prof. McDougall took the line here taken. As it is, the average psychologist will probably think twice before he falls foul of Prof. McDougall's science; and, after a while, he may even pluck up courage to follow him, and join in exploring the method of psychological treatment which he advocates. For after all the only method worthy of an *independent* science of psychology is one that appreciates the distinctiveness of mental life and conscious behaviour, and is willing to believe that this makes a difference. It has long been neglected, but largely out of servility and cowardice. Psychologists have lacked the courage of their convictions. They never fully realised that, having distinctive facts to consider, they had a right, and indeed a duty, of equipping themselves with a distinctive method, and that it was their business to discover one that would be appropriate to its subject matter, and would therefore work. No sooner had they emancipated themselves from the paralysing control of metaphysics than they embarked on a pertinacious attempt to gain scientific status by submitting to all the austerities of the mechanical hypothesis. In itself that was not wrong, for a method which has worked well in one subject is worth trying in others, even though such a transfer of method is not in itself a guarantee of success. But mechanism should have been tried *as a method*, and in competition with alternatives that were also worth exploring; and it should not have been persisted in when it failed to provide valuable clues to the intricate workings of the human mind. The very fact that the devoted labours of hundreds of academic psychologists for half a century led to so little that either the metaphysicians whom they had deserted, or the scientists whom they desired to equal, were willing to respect and recognise as indisputably science, should have made psychologists reflect, and look out for something more potent and more fertile.

Then came the War and ruthlessly applied the pragmatic test to the speculations of psychology. It forced dozens of psychologists to choose between applying their theories, by setting to work to cure multitudinous cases of fear neurosis, and going into the trenches themselves. Under this pragmatic compulsion these psychologists simply *had* to learn that psychological theories did not differ merely in the elegance

and completeness of their analysis. Some of them worked, others did not. For those, moreover, that did there existed an appreciative public, and psychotherapeutic practice became fashionable and lucrative. It would, surely, have been folly for academic psychology to have learnt nothing from all these developments, and to have gone on as if nothing had happened.

Prof. McDougall, therefore, is fully entitled by the present posture of affairs to come forward with proposals to scrap the methods of mechanistic psychology. For they had never made good. They had started with manifest fictions, which nothing but complete success could have justified; instead of which extended trial had proved nothing but their sterility. The psychological organism is not a 'mosaic,' but a whole, and reacts and functions as a whole. Hence 'sensations' are fictions, and so also are 'ideas'. Nor is the functioning of the living organism ever really to be interpreted as strictly mechanical, as Prof. McDougall shows with much ingenuity. "*Purposive action is the most fundamental category of psychology,*" he insists (p. 51). A mind's earlier and simpler, and in that sense 'elementary,' forms are to be found, not by 'analysing' it into a number of diverse and disparate factors, but by studying the behaviour, habits, and instincts of our animal kin, and tracing their continuity with our own proceedings. So we get a number of very interesting chapters on animal behaviour, full of racy quotations from Prof. W. Köhler's delightful adventures when interned at Tenerife with a horde of half-trained chimpanzees, and are spared the whole physiological apparatus of the senses, sense-organs, and sensations that usually forms such a snag for the non-physiological reader.

As might be inferred from the above, Prof. McDougall is a staunch upholder of the instincts, which he does not oppose to the reason after the fashion of Bergson, but regards rather as stimulating and assisting it. He maintains also his own published views about the instincts and the sentiments. On the other hand, he has changed his attitude towards determinism since *Social Psychology* first came out, and now repudiates it definitely, on the ground that it implies a denial of creative novelty. Why, he asks, "should we doubt that organic evolution is a creative process and that Mind is the creative agency?" (p. 448). This change, however, is quite in harmony with his general attitude, and of course involves no disuse of determinism as a principle of method. The chapter on Reasoning, though good, might advantageously have been extended; it rightly emphasises the importance of "sagacious selection of the relevant belief," but shows, perhaps, too much of the psychologist's traditional reluctance to tackle the logicians, and to correct the extraordinarily perverse accounts they give of the reasoning function.

On the whole, I am disposed to think that Prof. McDougall's book, by its admirable boldness and definiteness, is likely to do good service to psychology. The more discussion and dissent it provokes, the greater will that service be; for what psychology needs above all things at present is critical reflexion on its working assumptions, and careful exploration of all conceivable alternatives, with a view to selecting principles that will really work, and enable the science to predict and control the operations of the human mind. Personally, moreover, I believe that satisfactory principles *are* to be found in the direction in which Prof. McDougall is going; but even if we are wrong, the possibilities of an activist, biologically-minded, and teleological psychology are well worth exploring. I do not mean, of course, that Prof. McDougall has given to such a psychology its final form: it may be possible to carry it further than he has done, and it may well be that we have to go farther before we come to anything completely satisfactory. But even so, his work will

remain as a distinctive milestone on the road to a really satisfactory and efficient psychology.

F. C. S. SCHILLER.

History and Progress, and other Essays and Addresses. By HILDA D. OAKELEY, M.A. London: George Allen & Unwin, 1923. Pp. 270.

This volume is a collection of essays and addresses ranging in date from 1900 to 1922. Most of them are of a more or less philosophical character, while a few at the end of the volume deal with practical topics such as the university education of women and university settlements. The papers as a whole are intended, the author tells us (Preface), to "suggest a point of view which is the outcome of labours divided between the fields of practice and of philosophical study" and which "has developed through the effort to apply idealism to practice, and also to treat practice as a basis for thought". This combination of a philosophical with a practical idealism runs through all the papers: they are written in a fine spirit, both of enthusiasm for the highest interests of human life and of belief in the power and right of thinking to govern life.

The first paper on 'History and Progress' gives the title to the volume, and rightly so, for these topics, with others allied to them, may be said to be its central theme. The paper deals with the historical method as a factor in modern thought, and Miss Oakeley is inclined to rate its influence in this respect even above that of science. "The present age will be held hardly less remarkable for the progress of historic method than for the progress of science. . . . Greater, if we can compare the two kinds of development, is the increase in the depth of thought connected with the historic attitude of the present age" (pp. 13-14). The paper goes on to consider shortly the kind of progress to which history seems to point, and concludes that it lies, not so much in a higher development of individual human nature, as in the facts, first, that the individual enters into a much larger mental world, and, second, that fewer individuals in each generation are shut out from that world. The second paper asks what philosophy has to say in regard to the ends and methods of education. The third uses some recent books, such as Adam's *Religious Teachers of Greece*, as a basis for reflexion upon 'The Greek Contribution to Spiritual Progress'. The fourth paper on 'Poetry and Freedom' maintains the interesting thesis that the characteristic English love of freedom has found its truest expression in poetry rather than in philosophy. "Into poetry rather than into philosophy the deeper elements of the English spirit have entered" (p. 93). The connecting link between the love of freedom and that poetry which Miss Oakeley has in view is to be seen in individuality or self-expression as the inner meaning of freedom. "The liberty of each to be himself is the meeting-point of the practical and the poetic estimation of individuality" (p. 99). Moreover, "the poet's genius admits us to observe, almost with the directness of self-consciousness, thoughts, emotions and intuitions of human beings which in their quality proclaim freedom, and which do not get utterance in real life" (p. 106). A paper on 'Time and Eternal Life' makes a comparison between the views of Bosanquet and von Hügel and concludes with a decided preference for "the sublime philosophy of history" adumbrated by the latter thinker, as being "a truer expression of the most real experiences of the individual and the race, than that criticism of its value which belongs to Dr. Bosanquet's standpoint" (p. 127). I question whether Miss Oakeley's criticism of Bosanquet is altogether satisfactory from a merely technical point of view, although she is evidently anxious to do full justice to his

doctrine. But it is easy to sympathise with her dislike of the curious tendency which Bosanquet shows in more than one place to disparage history in comparison with science; and I think it is in substance a sound comment on the dealings of absolutism with time, when she says "To us . . . it seems that philosophy is bound to return again and again to those facts and values of experience which its method has failed to reduce to consistency, and pending their final resolution to admit their reality" (p. 131). Another paper on 'The Idea of a General Will' shows much the same attitude of mingled sympathy and distrust towards Bosanquet's views on that subject. The author seems to have been impressed by current criticisms—which are often mere misunderstandings—of Hegel and Bosanquet, and to regard their conception of a general will as ideal in the sense of being out of touch with facts. She would apparently prefer to work with the conception of a national consciousness as developed through history, and is thus led to suggest, for instance, that, as a result chiefly of "the absence of the indispensable historic experience," there is "no true general will in Germany of the present". This suggestion seems enough to show that the conception of a national will as understood by Miss Oakeley is no substitute for the conception of a general will as understood by Bosanquet, and that it covers a much narrower and more special range of facts. Among the remaining papers I would mention specially that on 'Thought and Practice,' which deals in an interesting way with the need in social work for uniting the two seemingly opposed attitudes of scientific detachment and practical reform.

Miss Oakeley's readers will, I am afraid, have ground for complaint against the style of her writing, which unfortunately does some injustice to the matter. It tends to be very abstract and sometimes rather ponderous. Take a sentence like the following: "This conclusion, I think, emerges from several lines of reflexion; and especially if we consider the unreality when brought face to face with the actual experience of the present, and of the past as interpreted by the present, of all attempts so to understand the universal principle in human activity, the principle of association, as to make of the State and its will transient forms, passing transmitters of value in the drama of progress, to vanish, as mankind grows beyond the rude infancy to which wars belong" (pp. 171-172). Sentences of this sort may not be actually obscure, but when there are many of them they either require an undue effort on the reader's part or else leave but a vague impression on his mind.

H. BARKER.

An Introduction to the Psychology of Religion. By ROBERT H. THOULESS, M.A. Cambridge University Press, 1923. Pp. 286. Price 7s. 6d. net.

Mr. Thouless has written an excellent book, of moderate compass, which may be cordially recommended to the beginner, but from which all students of his subject may learn. The style is unusually attractive, being of a clarity that carries the reader on and is constantly restoring his belief in his own intelligence. Nothing better could be imagined "for those who wish to study the psychological problems of religion, without any prior knowledge of psychological terminology". The explanation of terms, as of 'emotion' (p. 94 ff.), or 'suggestion' (p. 17 ff.), is exactly what a novice looks for too often in vain, and the same may be said of the chapter on Freud. It is a small point that at the outset 'religious experience' is rather narrowly defined as meaning "the feeling element in the religious consciousness" (p. 5), an exaggeration of the emotional

aspect of the psychosis in question which cannot, of course, be kept up, and does not exert much influence later.

Mr. Thouless chiefly relies for data on the autobiographies and other writings of religious persons, and draws illustrations principally from Christianity. Many of his quotations are fresh and memorable. After an opening chapter in which the specific character of religion is stressed, five chapters ensue dealing in turn with the main elements in religious belief—the traditional, natural, moral, affective, and rational. In the first of these attention is called to the fact that the hypnoidal state is often unintentionally produced in religious services, as it may be in the university classroom. A protest is rightly made against the idea to be found in many quarters “that the task of dealing with the moral conflict is the sole legitimate one for religion, and all that there is actually in the higher religions apart from the moral element is an accretion which it is the task of an enlightened criticism of religion to purge away” (p. 48). This is a point on which much confirmatory evidence might be found in Otto’s *Das Heilige*, where it is argued that the progress of religion may be measured by the deepening fusion of the *peculiar* religious element with the moral, but never by the replacing of the first by the second. It is shown that the expectation of certain types of conversion will produce these types, and visions and locutions found in the religious life are described carefully. “Rationalisation” is explained, and while it is admitted that processes of reason play a much less important part in the formation of our beliefs than we should like to think, the controversial method, dear to Le Bon, of assuming that it has played no part at all is faithfully commented on. More might have been said at this point of the believer’s keenly felt interest in the truth of his own beliefs. This is everywhere vital to the attitude of piety.

The writer guards against the notion that in religion or anywhere else you can explain everything by instinct, much less by some one instinct like sex, and that the hypothesis of “intelligent behaviour” is not required. He soundly concludes, on the evidence, that the sex-instinct is part of the instinctive foundation of religion, and that to regard this as a relationship which degrades religion is absurd. If human nature is a unity in any real sense, it is likely that every instinct will have some influence on religion and will not indeed be wholly out of relation even to the scientific love of truth; but the influence may be peripheral all the same.

Other sections of the book which deserve special note are the criticism of Durkheim’s theory that the forces which produce religion are exclusively social in kind; valuable pages on prayer and auto-suggestion; the comparison of the Spiritual Exercises of St. Ignatius and the system of the Yogis; and the exhibition of mysticism as involving the particular kind of mental prayer known as “contemplation”. A good deal is said lucidly about the distinction between the introvert and the extrovert type of mystic, and the reaction from an introverted to an extroverted state which is known to the initiated as the Spiritual Marriage. What Mr. Thouless has written on mysticism (with the exception of chap. xvi., on a certain unfortunate Mlle. Vé) seems to me an appreciable enrichment of English literature on the subject. There is a strong concluding chapter about the bearing of the whole investigation on personal religious belief, emphasis being laid on the point that the truth of religion cannot be proved by psychology, while yet the absence of such proof is no evidence that religion is false. He sums up in the statement that “we can never say more than that the success of a religious doctrine in rationalising experience creates a strong presumption in favour of its truth” (p. 281).

Mr. Thouless does not overestimate the help to be gained from psycho-analysis in elucidating the origin and growth of religious ideas, and he speaks with some severity of those who, when their inventive genius for new faculties gives out, bring in "the mystery of the *subconscious* or the more ethically pretentious *supraconscious*". None the less, he is not altogether free from a tendency to write as if an experience persisted in the mind, when all we can say is that *traces* of the experience persist. And there are passages on "unconscious incubation" that give one pause as much as any page in James. I find it difficult to understand these phrases: "a subconscious estimate of time" (p. 103), "their appeal reaches the unconscious processes of thought" (p. 115), "at this time the choice had been made in the unconscious" (p. 200). Jung's remark, "St. Paul had already been a Christian for a long time, but unconsciously," accepted by Mr. Thouless, hardly deserves to rank as a scientific, in contrast to a popular, statement. It seems to be implied that in the unconscious there can take place what we specifically call "judgment," and so far as I know nothing of the kind has been as yet even rendered plausible.

H. R. MACKINTOSH.

English and American Philosophy since 1800: a Critical Survey. By ARTHUR KENYON ROGERS. New York: The Macmillan Company, 1922. Pp. xiv, 468. Price \$3.50.

English writers have as a rule been most reluctant to produce histories of philosophy. They appear to be overwhelmed by a sense of the enormous difficulty of the task and of the awful dignity of the muse who presides over this form of composition. But histories of philosophy we must have, and therefore we owe some gratitude to those writers who are bold enough to undertake a task which they know can only be imperfectly performed.

The author of the present work makes, however, no pretence that his book was produced under the auspices of Clio. He does not even call it a history, but a critical survey. He invites us to look on it as being only an essay for the times, and his preface betrays a light-heartedness which is far from the mood in which a man sits down to write what he hopes may become a standard work. "I confess at the start," he says, "that the tracing of historical affiliations and historical causes has had only a secondary interest for me, and that the book as a whole is frankly propaganda, and designed to recommend one particular attitude as against competing attitudes."

Within these limits, however, he has succeeded in giving a reasonably objective account of all the important writers (and of some not so very important) of the period under review. His method is to begin with a short sketch of the doctrine of each particular writer, and to follow it up with a more or less detailed criticism. These criticisms, as he tells us in the preface, are made from the point of view of a theory which assumes that "the business of philosophy is to clarify and to bring into harmony, but also in the end to justify substantially, the fundamental beliefs that are implicated in our normal human interests". Prof. Rogers in fact is a militant realist, of that school which issued its manifesto some three years ago in the form of a volume entitled *Essays in Critical Realism*.

The method he has here adopted has, like every method which can be applied to such material, its own advantages and disadvantages. The period covered is one which contains a great variety of doctrines and tendencies, and anyone who deals with it is always confronted with the difficulty of making his work anything but a collection of separate studies.

There are various ways of unifying this manifold. There are people who suppose that they have grasped some peculiar quality which forms the essence of the Victorian mind, and that they can exhibit all the diverse theories as exemplifications of that quality. We are beginning to doubt nowadays, however, whether the word Victorian has any significance beyond a chronological one. Again it might be possible to trace a kind of logical development from one theory to another—and no doubt there are periods in the history of philosophy where ideas do seem to develop by a natural dialectic—but if anyone has ever succeeded in doing this convincingly for the nineteenth century, I should be glad to see his work.

In the case of Prof. Rogers, it is his interest in one set of problems which provides the guiding thread of the exposition. He is concerned chiefly, he tells us, "with those central and illuminating points of view which constitute a man's 'philosophy' in the distinctive sense". It becomes clear however as the book proceeds that for him the crux of the whole matter lies in theory of knowledge. But some of the thinkers of the period are much more directly concerned with this problem than are others. They tend therefore to fall into two classes—those in whom Prof. Rogers is really interested, and those who are treated merely because they happen to belong chronologically to the period. The writers previous to 1870 fall for the most part into the second of those two classes. The accounts given of them are clear and straightforward, but almost everything that is said has already been said better by someone else. The author has not anything fresh to tell us about Reid or the Mills, about Coleridge or Newman. The writing seldom attains any kind of distinction, and in this respect the book will not stand comparison with such a work, for instance, as Mr. Benn's *History of English Rationalism in the Nineteenth Century*. There is a moderately good criticism of Herbert Spencer (who gets thirty pages to himself); but it is only when he comes to T. H. Green that Prof. Rogers really wakes up.

The treatment of Green, Bradley, Bosanquet, and Royce, runs to seventy-six pages; and this section, together with the chapter on Pragmatism, seems to me the best part of the book. Both exposition and criticism are lucid and judicial, though naturally everyone will find points where he disagrees. The chapters on "Personal Idealism, Panpsychism, and Realism" and "Neo-Realism" deal more summarily with a large number of writers, but will be found a most useful guide by those who have not first-hand knowledge of all the works discussed.

Occasionally the attempt to classify everybody under only eight heads leads to somewhat bizarre results. It is a little surprising to find the chapter on "Naturalism and Evolution" ending with Browning and that on "Absolute Idealism" beginning with Emerson and Carlyle. And surely never before were Tennyson, A. J. Balfour, and John Grote grouped together in a single section.

The book as a whole is not unpleasantly written, and is certainly easy to read. Considering the author's confessed propagandist motive, the treatment of each of the numerous theories mentioned is remarkably fair-minded. The whole work is obviously the fruit of considerable labour, and a mere glance through the index is sufficient to make one ashamed to find so many books which one obviously ought to have read but which one certainly hasn't.

The index, by the way, contains very good lists of the chief works of each author, with the dates of publication. It is brought down to the year 1921, and ought to be quite useful for reference.

ALAN DORWARD.

La Théorie de l'Intelligence chez Schopenhauer. By PHILIPPE MEDITCH.
Paris: Alcan, 1923. Pp. 363.

The merit of this work lies rather in providing a useful general summary of Schopenhauer's position than in detailed exegesis or novel criticism. As a clear and concise account of the German philosopher's thought it is admirably done, though it seems to me at once too ambitious and not ambitious enough. On the one hand, the title seems too narrow, for the book might almost be described as an account of Schopenhauer's whole system of philosophy; on the other hand, no exposition could be quite adequate which does not bring Schopenhauer more into relation with other thinkers than the author attempts to do. We are left to glean his views of Schopenhauer's relation to Kant from a few stray references, and some of these are not at all happy. For instance, it is surely very unfair criticism, after classing Kant's theory of causality with those of Locke and Hume, to say that the vice common to all these theories is "the admission of the world as anterior to the law of causality, while in reality it only exists by the exercise of this law" (p. 37). Surely that "the world only exists by the exercise of the law of causality" is just what Kant held to be his own discovery. That he regarded certain elements in the world as given by sensibility prior to causality does not alter this, and, whatever the defects of the latter doctrine may be, it certainly does not seem an improvement to ignore the empirically given element in perception as the author often tends to do. These remarks are not intended to detract from the high quality of the work as regards its main purpose, the exposition of Schopenhauer taken by himself. No one can read it carefully without obtaining an illuminating general view of the German philosopher's system. The author is on most points himself a convinced adherent of Schopenhauer, and his very fidelity to him makes it impossible fully to criticise the work without a discussion of the general philosophy of the latter, for which this is obviously not the place.

Chapter I. gives a summary description of Schopenhauer's system of idealism and his general analysis of cognition and perception, Chapters II. and III. give his treatment of will in relation to intelligence and defend the doctrine of the subordination of the latter to the former, Chapter IV. describes his doctrine of "pure intuition," Chapter V. summarises his moral philosophy. The author lays special stress on the doctrine of "pure intuition" as a mode of knowledge and experience generically different from the discursive knowledge and practical activity of ordinary life, and as, in the author's and Schopenhauer's view, the only possible source of positive happiness, and also on the correlative disparagement of the ordinary intelligence as slave of the will. There is hardly any reference to Bergson, though the parallelism here between him and Schopenhauer is striking. The connexion between Schopenhauer's pessimism and his metaphysical theory of the blind will is very well brought out, though this connexion hardly seems to me to throw a favourable light on either the one doctrine or the other.

The author avowedly takes a subjective idealist point of view from the beginning. For him the chief difficulty of the system he is discussing, and indeed a fundamental antinomy of all philosophy, is the apparent incompatibility of the relation of the physical world to me as my representation with the fact that it existed prior to me and prior to the whole of humanity. He thinks, however, that Schopenhauer solves the difficulty by treating the series of physical phenomena prior to intelligence not as a series of phenomena in the true sense, but "as a state of will *sui generis* which only becomes the phenomenon by being known."

(p. 131). One of Schopenhauer's chief merits in the eyes of the author seems to be that he converted Kant's *Erscheinung* into *Schein* and made perception the work of intelligence and not of sense.

A. C. EWING.

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- M. C. Stopes, *Contraception : A Manual for the Medical and Legal Professions*, London, J. Bale, Sons & Danielsson, Ltd., 1923, pp. xxiii, 418, 12s. 6d.
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VIII.—PHILOSOPHICAL PERIODICALS.

THE JOURNAL OF PHILOSOPHY. xx. (1923) 10. **E. A. Bott.** 'Criticism and Ways of Inquiry.' [Discusses the methods of Psychology and points out that it is customary to beg questions which should be examined critically, such as the 'bifurcation' of the subject matter into 'differents' which are yet assumed to be essentially related.] **E. C. Tolman.** 'Mr. Mursell's Concept of Sensation.' [Cf. xix., p. 684 f. By identifying sensations with 'receptor responses' Mursell falls into the 'nerve-twitch fallacy'; for the right behaviourism, however, "the sensation process . . . is the discriminatory classification of a stimulus".] xx. 11. **J. W. Swain.** 'What is History?' I. ["When he comes to generalise the historian gets into trouble" and becomes a sort of sociologist. Originally history arose out of tribal myth; it was "a glorification of the group or an explanation of how things came to be," an aetiological myth, and "to this day the historian is a mythologist who is believed, the mythologist is a historian who is not believed". Without necessarily impugning the honesty of the historian, one always finds that in ultimate analysis the motive for his interest in the past lies in the present and in some living national or political issue. Hence, "nothing stales more rapidly than historical writing".] **G. P. Conger.** 'A Critique of Some Idealistic Evaluations of Values.' [Attacks attempts to represent values as absolute and to convert them into facts, and suggests that they may be vain because it may be "in the nature of things that our convictions about ultimates should be individual matters," resting on mystical feeling.] **M. S. Case.** 'The Aim of Philosophy' [Wants to know why the man who wants to know because he wants to know should not be the philosopher.] xx., 12. **M. C. Otto.** 'Pragmatism and the Concept of Wholeness.' [Criticises R. F. A. Hoernle's objection to pragmatist attempts to make the world better and orderly, on the ground that this presupposes a chaos. Hoernle assumes that an achieved order must be fictitious, that 'once a chaos = always a chaos,' and that the original = the ultimate. But these valuations are arbitrary, as it is to climb to "dizzy heights on the ladder of particulars, kick it over, and thereafter refer to it as an illusion".] **J. W. Swain.** 'What is History?' II. [Shows that the French and German 'scientific' historians of the nineteenth century were in all cases patriots in disguise, differing only in degree from the *French Revolution* of Mrs. Nina Webster.] **L. K. Frank.** 'The Locus of Experience.' [Declares A. O. Lovejoy's difficulty in xix., 1, about 'the locus of past experience in a physical world' to be due to the use of 'figurative' language. The past is 'recovered' because it is never lost; it persists in the modification of the body.] xx., 13. **J. W. Swain.** 'What is History?' III. [Examines the cases of J. H. Newman and H. G. Wells, disagrees with Mr. Henry Ford's dictum 'History is bunk,' illustrates the practical importance of philosophies of history, guards himself against condoning the paid 'propaganda-histories' circulated during the War, and summarises: "the historian is a scientist neither in purpose nor in method: his purpose is to make a certain view of the world prevail,

his method is to tell history in such a way that this philosophy will seem to be immanent in it". His ideals and purposes "resemble those of the novelist, and especially the historical novelist much more than they do those of the scientist". He is "really a humanist". Also no history will ever be final": . . . "though all historians had free access to the archives of the Angel Gabriel and no single fact were disputed, they would never agree as to how the story should be written. Each age must create its own past as it creates its own present and future".] **L. Stein.** 'Notes on "Bush on Carpenter".' [Apropos of xx., 1 and 2, denies that art is essentially representation, that painting, being static, can have the emotional potency of music, and that the field of art can be reduced to that of aesthetics.] xx., 14. [The copy of this No. which reached *MIND* had interspersed in it eight blank pages, so that no adequate abstract of the articles was possible.] **E. J. Swift.** 'Language, Thought and Instincts' [behaviouristic]. **S. C. Pepper.** 'Art and Utility.' ["Real utility is the valuing of a thing as a means to an end." Derivative from this are four other senses, (1) value in general, (2) fitness, (3) potential utility, (4) the idea or type of utility. "In none of these derived senses is utility an instrumental value." And it is only in some of these that "utility finds its way into art". When they are excluded the field of aesthetics may be 'roughly defined' as that of "things liked or disliked for themselves".] **J. B. Pratt.** 'Mr. Moore's Realism.' [Review of *Philosophical Studies*.] xx., 15. **H. E. Mantz.** 'The Reality of Types.' ["The various literary types have existed in our esteem only in so far as they have fulfilled a useful function other than that of satisfying the antiquarian's love of beauty." Hence "a definition of literary form or type is intrinsically impossible unless it be a definition of function".] **J. S. Moore.** 'A Defence of the Foundations of Psychology.' [Reply to reviews by M. W. Calkins in xx., 1, and by R. M. Ogden in the *Phil. Rev.*, Jan., 1923.] xx., 16. **J. R. Kantor.** 'Concerning Some Faulty Conceptions of Social Psychology' [concludes that "as a matter of fact social psychology can only deal with actual responses of specific individuals to specific stimuli situations". The difference between a social and an individual psychological fact is merely that "the data of social psychology constitute cultural reactions".] **H. L. Hollingworth.** 'Meaning and the Psychophysical Continuum.' [An "account of meaning based on the redintegrative mechanism". It is "the fact of redintegrative effectiveness" and "but an aspect of the correlation of natural events" which "does no violence to the integrity of the psycho-physical continuum".]

REVUE NÉO-SCOLASTIQUE DE PHILOSOPHIE. xxv Année. No. 98. May, 1923. **M. de Munnynck.** *L'analogie métaphysique.* [A suggestive essay on the precise character of the "analogical" reasoning by which, on the Thomistic view, we can argue from the creature to the Creator. Analogy is carefully discriminated from both metaphor and symbol, and it is agreed that among recent philosophers, Rickert and Bergson would have achieved more if they had been alive to the possibilities of the analogical method.] **L. Noel.** *Le Réalisme Immédiat.* [The doctrine of Thomas is an immediate realism, according to which we directly apprehend a real object, but it is not, like much modern realism, crude and uncritical; it leaves a place for all legitimate "critical" questions. A well-thought-out essay.] **J. Henry.** *Bergsonisme et Morale.* [Parodi has called attention to a rising tendency to utilise Bergson's ideas in the service of an anarchic "ethic of individual intuitions". It is possible, however, to employ these ideas in the opposite sense, and to see in the moral order precisely the special new contribution of man to the march of

evolution. It is said that there can be no "moral science," because morality is not science but "life". The moralist's business is not to teach anything but to get his type of morality acted upon. But in what does this "life" consist? In a fervent faith in the "ideal". Hence there is the closest connexion between ethics and metaphysics, and, as B. says, "great good men" are revealers of metaphysical truth. Here we meet with an insoluble difficulty, arising from B.'s anti-intellectualism. To "live" his moral creed a man needs to be inspired by belief in it, and yet the belief is represented as an "artificial" creation of the life inspired by it.] **A. de Poorter.** *Un Manuel de Prédication médicale.* [Text, with description of the MS., of a manual of rules for preachers by William of Auvergne, Bishop of Paris from 1228 to 1249.] **E. Janssens.** *Le Probabilisme Moral et la Philosophie.* Book Reviews, Notices, etc.

RIVISTA DI FILOSOFIA NEO-SCOLASTICA. Anno xv., Fasc. 2-3. March-June, 1923. **M. Grabmann.** *La scuola tomistica italiana nel XIII e principio del XIV secolo.* [A learned account based on unedited MSS. sources of the earliest associates and disciples of St. Thomas.] **J. Maréchal, S.J.** *De la forme du jugement d'après S. Thomas.* [A careful and excellent essay on Thomas's view of the fundamental character of logical judgments, with interesting comparisons with Leibniz and Kant.] **G. Rossi.** *Studi rosminiani* (I). [Directed against the tendency of Gentile and others to exaggerate the influence of Kant and Hegel on Italian philosophy. The inspiration of Rosmini is not to be sought in German philosophy, but, as he professed himself, in Plato. Further studies of Rosmini, Galluppi, Gioberti, Mamiani are to follow.] **E. Ciapandini.** *Il dolore, la tristezza e le passioni nel pensiero di Cicerone.* [A good study of Cicero, *Tusculans* II-IV. Perhaps the writer has unduly neglected the question of the sources on which Cicero is drawing. Certainly he confuses the real doctrine of Plato with the eclectic "Platonism" of Cicero's age, and then falls into the error of ascribing to Plato the rigid Aristotelian distinction between speculative and practical science.] Reviews, etc.

RIVISTA DI FILOSOFIA. Anno xiv., No. 1. January-March, 1923. Short editorial note by G. Tarozzi on the aims of the review in its reconstructed form. **B. Varisco.** *Determinismo e libertà.* [Condensed but excellent. All "happening" presupposes (a) initiative, (b) interrelation through causal laws with all other "happenings". It follows that a "completely determined happening" is impossible. In human conduct, as it becomes more reasonable and virtuous, there is a steady advance from indeterminate to more and more definitely determined behaviour.] **R. Mondolfo.** *Educazione e rinnovamento sociale in Mazzini e in Marx.* [There is an undeniable incoherence in Mazzini's fundamental ideas. The "revolution" is to be based on high spiritual ideals. But the education of the oppressed into these ideals will never be achieved by their oppressors, nor yet can it be achieved by themselves so long as the revolution has not taken place, as they have no chance of being more than brutes. The writer therefore holds that Marx, who would upset all "institutions" and trust to new social conditions to bring a new ideal with themselves, is the more logical thinker. May we suggest that the whole problem is an unreal one, since society is not in fact divided into wholly conscienceless oppressors and a wholly brutalised "people"??] **G. Rensi.** *Platonismo e idealismo.* [All "idealism" is Platonism, though it may be ashamed of the fact. And Plato is tautological nonsense. He and Socrates pretend that "good" and "true" have an absolute meaning, but Protagoras had proved that "good," "true" only

mean what a given man is pleased to think good or true.] **A. Pastore.** *Filosofismo e filosofia.* [Interesting remarks on some of the dangers of the post-bellum temper in philosophy, especially on the tendency to glorify "action" at the expense of steady hard thinking.] **C. Ranzoli.** *L'idealismo e la centralità dello spirito.* [Reality is psychophysical; the universe possesses "the minimum" of harmony compatible with its existence. This disposes of both idealism and realism. But it remains true that reality is the expression of *Lo spirito*. I am afraid *Lo spirito* is as much of a mystery to me as the "concrete universal". Possibly this may explain why I cannot see that "without reality, no thought" is the logical converse of "without thought, no reality".] Reviews, etc. Anno xiv., No. 2. April-June, 1923. **A. Levi.** *D. Hume e la critica del pensiero religioso.* [A good summary, but I regret to see the foolish *Essay on Miracles* treated as on a level with the *Dialogues on Natural Religion*. And I wish Mr. Levi had taken the dramatic character of the dialogues into account. He misses the irony with which Hume treats both Demea and Philo. This irony suggests that Hume is speaking his own mind when he says that the "opinions" of Cleanthes are probably not far from the truth.] **A. Banfi.** *La tendenza logistica della filosofia tedesca contemporanea e le "Ricerche logiche" di E. Husserl.* [The beginning of what promises to be a valuable study.] **V. Cento.** *Appunti di critica gentiliana.* [The "criticisms" are given in the form of short detached notes, but are much to the point. To myself it appears that there is no answer to the charge that Gentile makes real liberty and consequently morality and religion impossible, and that in particular he has no conception of the meaning of Christianity.] **E. di Carlo.** *Una Lettera inedita di V. Gioberti.* **A. Corsano.** *Il pensiero politico di G. B. Vico.* Reviews, etc.

LOGOS. RIVISTA INTERNAZIONALE DI FILOSOFIA. Anno vi., Fasc. 2-3, April-September, 1923. **G. Fornaro.** *Henri Poincaré.* [First part of a discussion of the general philosophical position of P. Deals specially with the meaning of his view that "scientific laws" are "conventions".] **C. Ranzoli.** *La Filosofia e l'unità dello Spirito.* [Philosophy is, so to say, the advance-guard of the sciences. Its divinations may be erroneous but are often "fruitful" errors. Like a geographical explorer, the philosopher must use all his endowments, intelligence, intuition, imagination, feeling. It is assumed that the one and only true philosophy is that of *Lo spirito* as the final outcome of a cosmic evolution. But is it so certain that, say, Swinburne's *Hymn of Man* is inspired by the *sobria ebrietas Spiritus*?] **E. Martorelli.** *Di alcuni accenti pragmatistici nella filosofia di Antonio Genovesi.* [Genovesi, who has been unduly depreciated by Gentile, anticipates the pragmatist conception of science as instrumental, and the consequent depreciation of "useless knowledge". This is natural, since G.'s inspiration comes from Locke in whom the later "pragmatist" positions are implicit.] **C. Schuwer.** *L'irrazionalismo contemporaneo, l'art et Dada.* ["Dada" is an indirect emanation from contemporary "irrazionalismo". But it is an emanation which caricatures and deforms its *fons emanationis*. What can be made of a "school" in which the whole time-table is given to play, especially when the games have no rules and it is questionable whether the players get any fun out of them?] **G. Della Valle.** *Valore e suggestione.* [Values cannot be communicated from one person to another by demonstration (since each must intuit them for himself), but only by "suggestion," and suggestion does not create new energies but develops existing ones and makes them efficacious. The main task of education is precisely this suggestion of values. Even instruction by textbooks, etc., is simply the

"suggestion" of "logico-existential" values. A consequence is that, even in the most elementary teaching, our aim should be to develop the power of "intuition". Anyone can teach grammatical rules; it is another matter to develop a "sense for language". Even in economics the influence of suggestion is paramount. Our judgments about "needs," "values in use" are mostly due to suggestion. Without it there would be such disagreement in valuations that industry and commerce would be impossible. The man who "suggests" a new value-judgment is as much a "creator of wealth" as the "producer," and is consequently equally entitled to his share of the profit. Economic values are the substructure of science, art, morals; it is a duty of the school-teacher to "suggest" these values to his pupils. Moral progress illustrates the same point. Human life itself is based on a metaphysical "act of faith" in values; the faith may sometimes be illusory, but even illusions often end by justifying themselves. But mere want of faith is hopelessly sterile. Hence a pedagogic theory like that of Herbart, which reduces education to mere instruction, stands condemned.] **F. Ercole.** *A proposito di una recente interpretazione della 'Divina Commedia'.* [Discussion of the theory worked out by Pascoli and L. Valli, following up earlier suggestions of Caetani di Sermoneta, that Dante's poem is intended to expound a theory that the achievement of Redemption depends on the Empire no less than on Christ and the Church. This is assumed to be the key to the numerous enigmatical passages of the *Comedy*; they all become clear if we note the constant conjunction of two symbols, the Cross and the Eagle. The origin of the theory was the real or supposed discovery of the Duke of Sermoneta that the "messenger from Heaven" who forces the gate of the "city Dite" in *Inferno* IX. is Aeneas, the founder of the Roman people. The extremely heretical character of the doctrine explains the care of the poet to wrap it up in mystery. Mr. Ercole, though willing to admit the importance of the parallelism between Cross and Eagle, rejects the interpretation put upon it, on the ground that it presupposes a confusion between original sin itself and the *infirmis natura* which survives, after baptism as a consequence of original sin. It is the former which is abolished by the redemptive work of Christ; the latter which further requires the remedy of a righteous world-monarch. The confusion is unthinkable in Dante, not because it is impossible that he should have been heretical, but because the particular confusion arises from misinterpretation of the very passages of Augustine and Thomas on which Dante is assumed to have based his theory. Mr. Ercole follows out his main contention in detail in a way which seems to offer a crushing refutation of this "new" interpretation of Dante.] **P. Masson-Oursel.** *La métaphysique comparée.* [Metaphysic is the heir of religion. It attempts to achieve, by an intellectual ascent through forms of thought to an unconditioned first principle, that union with the "absolute" which religions effect by penances and initiations. This is illustrated by the philosophies of Plato, Aristotle, Plotinus, Malebranche, Spinoza, Confucius, Lao-Tze, by Christian theology, by the Brahmanas, the Buddhist systems, etc. "There must be something in all this," but how much there is in it the writer does not attempt to say. I fear he has succumbed to the temptation to throw together, as coming to much the same thing in the end, systems of thought which have originated very differently and are not always very much alike. Plato has not much in common with the initiates of Eleusis and it is hard to see that either have much in common with Oriental seekers after non-existence. Comparisons are suggestive, but not if the characteristic features of the things compared are carefully obliterated.] **Reviews, etc.**

IX.—NOTE.

DASGUPTA'S "HISTORY OF INDIAN PHILOSOPHY".

REFERRING to Mr. E. J. Thomas's comments on my review of Prof. Dasgupta's *History of Indian Philosophy*, I may perhaps be allowed to explain that I undertook to review that book under some pressure, which probably I ought to have resisted. I was, of course, aware from the outset that I was not competent to deal with the book from the point of view of oriental scholarship; but I was led to believe that what was wanted in MIND was an account of its contents that could be appreciated by students of philosophy without such scholarship. I realised too late that not much could be made of it in this way, and had to content myself with some general remarks that were probably not very enlightening, and may have been positively misleading. It does not appear to me that all Mr. Thomas's criticisms are valid, and I am writing to him on the subject; but I do not think that what I have to say would have much interest for the readers of MIND. I wish to add, however, that I am glad that the imperfections of my review have provided Mr. Thomas with an opportunity of giving his emphatic testimony to the scholarly excellence of Prof. Dasgupta's work—a matter on which I could not have ventured to express an opinion without very gross presumption. I confidently expect that the book will be warmly welcomed by competent judges on account of its ripe scholarship and complete reliability.

J. S. MACKENZIE.

UNIVERSITY OF CALIFORNIA.

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